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AROUND THE LAKES.

CLEVELAND, OHIO.

Mr. John Corrigan, vessel owner, left this city a few days ago for Havana, Cuba. The trip will extend over a period of three weeks.

The schooner John O'Neil, will be commanded next season by Captain P. Leon, who has been with her six years, and the Kate Winslow by Captain Wm. Somerville.

A number of vessel men along the river have sent a petition to the common council endorsing Harbor-master Lynch's conduct in office, and asking for his retention in that position.

Captain Ira Mansfield, of Lorain, Ohio, was in the city last Tuesday on vessel business. Captain Ira seems pleased to anticipate the successful career of his new command, the Germanic.

Mr. John Brodenick, last year in the employ of Palmer & Johnson, has been appointed engineer of the steamer Henry Chisholm, and will, as soon as the ides of March prevail, take charge of his machinery.

Captain P. J. Lavoo, Huron, O., is in the city to day taking bearings on the opening prospects of the season. The Captain will run his schooner under a changed name, Hattie A. Estell, being formerly the Mary L. Higgie, Chicago.

The Providence windlass and the steam capstans, from the American Ship Windlass Co., of Providence, R. I., for Rhodes' new boat, building at Quayle's Sons' shipyard have arrived here, also the Williamson's steam steerer for the same boat.

Messrs. Bassett, Presley & Train. Iron and Steel warehouse. report a brisk outlook, and a demand for sheet iron, boiler iron, and tubes, rivets, and general ship iron, and spikes; while bar iron, and material for agricultural implements is quoted as being quiet.

At Quayles' Sons ship yard, the boat building for R. R. Rhodes, is well along, being nearly all planked, and her machinery all on board, the finishing up about decks and the joiner work is going on regularly, and from the present outlook she will be ready to launch about the middle of April.

The work of surveying the lake fleet so far as necessary to make a report for the Lloyds Register is now complete for Lake Erie, and a week or two will be sufficient to finish the whole survey. As this work was continued all through last season it is a comparatively easy task now.

Captain Frank Brown, of the schooner May Richards, has just returned from Lorain, having completed repairs to his vessel, making her now a single decker, and one of the finest on the lakes for handling cargo. Captain Brown will proceed to Buffalo to repair the schooner George Clinton, recently purchased by Murbach and Folger.

The boat building for Captain Thomas Wilson is now having her lower deck frames, iron arches, aad straps in place, and the work on her is progressing rapidly, in spite of the soft weather which we have been having this winter. The boat building for J. C. Lockwood, of Milan, Ohio, is now about two-thirds in frame, and steady work is being done on her from day to day.

G. A. Matthews, last season engineer of the steamer Egyptian, has built a boiler shop on the ground formerly occupied by the American paint company's works east River street. In addition to boiler making, and repairing. Mr. Matthews is prepared to do steam fitting, and plumbing, and deals in engineers supplies. He is open to contract for any work pertaining to marine engineering.

Captain N. Bartlett, "the good man at the wheel" from Ashtabula, is at home to all his friends on board his fine ship Uncle Sam. He is very happy; being sole owner, and monarch of all he surveys, as he has a bona fide title of the ship. Captain Mulholland and family paid him a visit Sunday, and made him a present of a few luxuries.

The Clevelnnd shipbuilding company's shipyards, and their extensive machine, and boiler shops present a scene of activity. Several hundred feet of the finest class of steamship now lines the river front, ready to launch at an early date. The Cleveland Iron mining company will have two of the finest boats it is possible to produce, if eminent skill, and excellent material is to be counted in the result.

Work at the Globe Iron Works is being carried on with their usual briskness, and the machinery for the new boats now under construction by the firm, furnishes employment for a large number of skilled mechanics. At the shipyard their efficient superintendent Mr. John Smith, keeps the busy hum alive, regularity, and discipline, being the order of the day during the hours of work.

The appointments credited in our last issue as follows: The Port Huron transportation company have made the following appointments for the season of 1889: Steamship Gogebec, Wm. Neil; the new steambarge Pawnee, Captain Al Neil, sr; Nelson Mills. Captain John Sims., should read, steamer Gogebic, owned by the Mills transportation company, steamer Pawnee owned by the Pawnee boat company, and the steamer Nelson Mills, owned by N. Mills and Co., of Cleveland.

At Cleveland dry dock the barge Sumatra of the Orient line is undergoing a thorough calking, and being generally overhanled. The tug Thomas M. Moore, had a leak stopped, and bows ironed, having been slightly injured with ice, she will come out of the dry-dock to-morrow, also the Sumatra. The S. E. Sheldon of the Bradley fleet will then be docked for re fastening and calking. Work on the new Johnson boat is progressing rapidly, her four pole masts are all ready, and fitted with the iron work, two of the sticks are 90 feet in length, one 92 feet, and one 76 feet.

Alfred J. Russell, of the firm of Russell & Watson, Buffalo, was in the city on Tuesday last. We believe that the firm of Russell & Watson, or what was until recently, the firm of Felthousen & Russell, is the only manufactory on the chain of lakes where signal lamps and lamps of all classes are made. The superiority of their work has given them a prestige in the marine would second to none, and we should like to see the new members of this old established house, prosperous, and maintaining the excellent reputation won by their predecessors.

We have heretofore noted the improvement being made by the Globe Iron Works company. It is now the time to make mention of the sequel. The new offices are completed, warmed and lighted, and every one happy. We are not good at details, leaving those to the "Lord to low ambition and the pride of kings. But. we desire to say that no one can dispense hospitalities in a better manner than that of Mr. J. H. Parkhurst's, at the meeting last Saturday "a house warming" in the old style,—that is, the host could not pay too much attention to guests. We join with many in wishing much prosperity to a company that remembers these things.

Captain Ira Mansfield, last season on the steamer Christie, says that the Providence windlass, manufactured by the American ship windlass company, Providence, R. I.. is the best windlass ever placed on a vessel, in so far as his personal experience is concerned, and is more than pleased that the Germanic. the fine steamer which he is part owner of and which he will sail himself this coming, season, is already fitted with the Provicence windlass. In conversation Captain Mansfield remarked that on one occasion off Whitefish Point he had hove in 60 fathoms of cable chain, catted, and fished his anchor, and wss under weigh, before a number of other vessels with inferior windlasses had hove short.

Meteorological summary for the week ending March 5, 1889:

Mean barometer	30.20
Mean temperature	38 9
Mean humidity	8.8
Total precipitation	.28
Prevailing direction of wind	N. W.
Total wind movement, miles	880
Average cloudiness	4 5
Average state of weather	Cl'dy
Max. temperature, (highest)	40.3
Min. temperature, (lowest)	29.0

W. H. HARMON, Sergeant Signal Corps.

Mr. E. C. Chambers, of Frankfort, Mich., vessel owner, was in the city Wednesday.

The graduates of the nautical school, which has been held in the Seymour block during the past few weeks, graduated the following officers: John B. Hall, last year on the Corona; E. Mooney, last year on the Cambria; W. W. Dawley, of the Wilson Transit line; James W. Higgins; Wm. Megarvey; Harry F. Holmes, last year mate ef the S. E. Sheldon; all received first class certificates. Samuel C. Allen, wheeleman on the Ranney; Thomas S. Fagan, also wheelsman on ihe Ranney; C. R. Baker wheelsman on the E. B. Hall; Henry B. Brock, mate of the Schnoor. All of these certificates are for steam and sail, and we congratulate the candidates. A nautical school is a matter long desired, and while Captain Bradford, the teacher, who returned to Buffalo Tuesday, has not become very wealthy during his sojourn in Cleveland, he has made several good navigators. In case Captain Bradford should find it convenient to return to this city next season, we trust he will find a larger class, and therefore more profits

A fortnight ago the *Leader* published an article upon the iron ore interests of Cleveland, in which it was shown that the ore carried out of the city as freight was handled, for the most part, by two railroads—the N. Y. P. & O., and the Cleveland & Pittsburg, the former transferring to its cars 600,000 tons of ore, and the latter 300,000 each year. The difference in favor of the N. Y. P. & O. road was due to the use of improved machinery. The grand possibilities of "Whiskey Island," where the C. & P. ore docks are located, were recognized, and the fact reported that that railroad had decided to expend $800,000 in improvements upon them. The fact that Ashtabula led Cleveland last year as an ore port, and as many believe, because of its superior equipmeut of improved machinery and hoisting facilities, suggested a field of enterprise to a number of Cleveland gentlemen, the first fruit of which was produced at Columbus yesterday. Certificates of incorporation were filed with the secretary of state for the Cleveland & Pittsburg Dock Co., of Cleveland, with a capital stock of $250,000. The incorporators are Calvary Morris, M. M. Hobart, Charles H. Cole, J. E. Newburn, and William J. Nevens. The money is to be mostly furnished by Calvary Morris, of Cleveland, and J. W. Ellsworth, of Chicago, members of the firm of Morris, Ellsworth & Co., coal dealers. These gentlemen are to build docks on Whiskey Island, where they have have leased the territory of the C. & P. company. They are to invest several hundred thousand dollars in hoisting machinery. and will do the handling of coal and iron ore, formerly done by the railroad company. M. M. Hobart, Esq., the counsel for the company, told a reporter last night that every thing for the enterprise was arranged and work would be begun at once, on a large scale.

BUFFALO, N. Y.

Special to the Marine Record.

Mr. W. G. Scott, who has been for several years in the ship chandlery business, representing some of the best houses in Chicago and Detroit, has moved here from West Bay City, and will carry the banner in the interests of Howard H. Baker & Co., during the coming season. Mr Scott is well known to the marine community, and we wish him a full measure of success in his connection with the extensive firm of Howard H. Baker, & Co.

The schooner Erastus Corning has been sold to the Lorain syndicate that bought the H. W. Sage for $17,500. Buffalo men were after her, but were too late. She was built in Tonawanda N.Y.,1867, measures 791 tons, rates B1, and is givena Lloyds valuation of $18,000.

ERIE, PA.

Special to the Marine Record.

W. J. Bates, shipbuilder, is doing neceesary repairs to the Anchor line steamers Alaska, Delaware Gowan, Campbell, and Susquehana.

Captain L. Davis is getting some calking and necessary repairs to his schooner F. W. Gifford, and she will come out in the spring as good as new.

ASHTABULA HARBOR, OHIO.

McKinnon Brothers are very busy getting out new dock machinery and iron ore buckets. They have gone into the boiler business in connection with their machine shops, and are doing considerable repairs on vessels' boilers laid up here. They have purchased considerable land adjoining their present works, with 226 feet frontage on the river upon which they will, in the near future, erect larger works as they find business increasing.

J. S. Sheldon & Son have removed their meat market about fifty feet in the rear of the old stand; their market will now face the river. They were compelled to move to make room for the new bridge.

J. G. Laiard is putting new ceiliug and hatch coamings in the schooner Negaunee; caulking the steamer Kittie M. Forbes from the water's edge up; has caulked the barge Mabel Wilson's deck; put new ceiling in the steamer Jim Sheriffs; doing necessary repairs upon the tug Grace and Ella. He has just added to his ship yard an eighteen horse power engine, jig saw and planer, to enable him to do all work expeditiously. He is to commence building a fishing tug 45 feet keel, 50 feet over all, 11 feet beam, 4½ feet depth of hold, for William Tallman.

We are pleased to note that Captain W. W. Starkey has nearly recovered the sight of his left eye, so that he can easily tell an old whale from a shoal of sharks. He is about to build a three story brick building on the old site where he was burnt out in January, 1886, and hopes to open up his new store in July, next. Captain W. W. Starkey's business has so increased at Ashtabula Harbor that he found it neeessary to have his son, J. C., give up his store at Fairport and join him at Ashtabula Harbor.

The King Bridge Co., of Cleveland, have contracted to build a new iron steam bridge in the place of the wooden structure now in existence. It is to be completed by July next. It will have a span of 120 feet, and will be 20 feet wide; it will be a very fine structure. The old bridge will be placed a short distance down the river to accommodate passengers until the new one is completed.

The Lake Shore docks are being very greatly improved and added to by rebuilding, repairing, and new machinery.

The Mutual Transportation Co., of Cleveland, are making extensive alterations and improvements on their dry docks, by putting in seven new legs for hoisting purposes. McKinnon Brothers are doing nearly all the work for the company.

Four new brick stores will be erected this spring, on Bridge street.

Captain George Ford and Redhead's two new stores will be removed to the eastward to make room for the new bridge.

James P. Devney's ship yard, Ashtabula Harbor, has given the barge Wayne new rail and monkey rail all round, all new hatches, and part new stringer under the rail. Steamer Wheeler, caulking outside from light water mark to the rail, ceiling, between decks, with four threads of oakum; decks on each side of hatches, new gaff and stem. Barge Genoa, four new hatches, 150 feet new rail, and part new monkey rail. Pickands & Co's scow Atlantic, lengthening 30 feet, caulking all over, new gunwales for rail track for hoisting machine to run on. Two new tugs, length 50 feet, 11 feet beam, 4 feet and 6 inches depth of hold, good model and well adapted for fishing purposes. New scow with steam for Yougheney Co, length 125 feet over all, 30 feet beam, with six gunwales, planked throughship deck to run fore and aft, with track for hoisting engine, and to use for propelling the same, 12 by 12 inches, wheel 48 inches; she is to be ready by the middle of June. The steambarge Jim Sheriffs is having her boilers raised and repaired by the Cleveland Machine and Boiler Works Co. Eight men have been sent by the company to do the work. WILLIAMS.

PORT HURON, MICH.

Special to the Marine Record.

The tug Porter is in Dunford and Alverson's dry dock, receiving new ceiling, frames and upper works, and she is having her stem renewed five feet. The Porter will be in first class shape when she comes out of the dock. The barge Ida Corning is also in the same dock receiving new ceiling, frames, and other repairs.

The schooner Skylark, and Barge Hale, are engaged in transfering grain from P. B. Sanborns elevators to his Sarnia elevator.

Love and Scovefild shipped on Monday, the boiler for Simon Langell's new steambarge building at St. Clair

James Karnehan has been appointed steward on the steamer Darius Cole, for season of 1889. Mr. Kernahan has made a great number of friends on the river route by his obliging ways.

The steamer A. J. Wright, is having her engine overhauled.

James Reid of Bay City, was in this city Monday, looking after his vessel interest.

Captain Thomas Currie, of this city, has purchased the tug George N. Brady, from Fisher, Wilson & Co., of Cleveland. Captain Currie will command her the coming season.

The steam barge Westford, came out of the Wolverine dry dock Tuesday, in first class shape.

The steambarge City of Concord, is in the Wolverine dry dock, receiving a new stem, calking, and other repairs. Captain Frank Hebner is looking after the work.

Captain Samuel V. Parsons, of Buffalo, and J. M. Jones, of Detroit, are looking over the losses on the burned propeller Colorado.

CLAYTON, N. Y.

Editor of Marine Record.

George M. Tilton goes chief engineer of the steamer Argonaut, now at Ogdensburg.

M. W. Allen goes second engineer of the steamer Sheffield.

Captain Ben Calhoun has a gang of carpenters at work on the schooner Montana, giving her a general overhauling.

The steamer Juniata is being rebuilt from the keel up; new cabins etc. Captain Rattery will have a fine boat when finished.

Minor repairs are being made on the schooners Hartford and Cornelia.

MT. CLEMENS.

The keel of a new tow barge, was laid down last week, at Captain Dulac's ship yard, for the Tonawanda Barge Line; the dimensions are just the same as the last one sold some time ago. Keel, 178 feet; beam' 32 feet; depth of hold, 12 feet; over all, 185 feet. She is to be made of the best of oak, and has already some frames up. She is to be ready for business by July first, and will be employed in the lumber trade from Manistee to Tonawanda. Mr. Archie Stewart, of Port Huron, is the builder. She will carry 800,000 feet of lumber, or 1,000 tons of iron ore.

The work on Captain A. Tucker's new boat is going on rapidly. She is all planked inside and out, and deck beams all on; she will be ready for the opening of navigation.

Captain J. S. Ruby is doing minor repairs on the J. S. Ruby.

Mr. Edward Smith, of Forester, Mich., sent a petition to have captains and owners sign for a life saving station at that place. Eighteen signatures of captains and owners were obtained and sent.

William Winmill goes mate of the Chenango.

CHARLEVOIX, MICH.

Special to the Marine Record.

No ice in sight, but small driftings of ice. Weather very warm the last week.

The Pine Lake passenger boat, Clara Belle, is being lengthened 16 feet. The scow Lottie Mason, receiving new plank share, new cabin, deck frames, decks and stanchions; schooner Fleetwing, new frames, lining and fore mast; schooner Peoria, new main mast, top mast, and new lining. H.

LORAIN, OHIO.

The Erie street bridge has been completed, and we now have 20 feet more in the draws than there was before. Vessels frequenting this port will find the increased facilities a great assistance.

THE CHALK AGE OF MECHANICAL ENGINEERING.

BY J. F. HOLLOWAY, OF NEW YORK CITY.

I need not deescribe to you the changes that have come to the exterior of the modern machine shop; you see them everywhere with their storied walls rising high in the air, with railway tracks running beside them into well arranged yards, where giant cranes lift with outstretched arms, pon erous beams and bed plates, finely finished engines, and other massive machinery with celerity and ease. If you do but look closely, you see also the little lawn beside the door, where in the early spring time budding blossoms grace its border; and in the summer, nodding rose bushes add beauty to the scene and a pleasing odor to the air. It was not thus in the "chalk age."

Accustomed as are those before me to see and to use the elegant and burnished machine tools of to-day, in which each curve in the leg has been the study of an artist, each screw and bolt modeled after the most approved scientific formula, where the cross feeds, the disengaging gears, the stop, as well as the go-ahead motions, have been by one maker taken from another, and altered and changed beyond the recognition of its author, until like the bones of the pauper, it is something "nobody owns."

I can perhaps convey some idea of what the old time machine shop had, by naming some of the many things it did not have. While it did have, as you will infer, a foundry at one end and a smith shop at the other, and between them little else that smoke and grit, fortunately the latter got so well ground into the apprentice boys of those days that it stuck to them all their lives, and served to help them out of many a difficulty.

There were no planers there, no slotters or shapers, no boring mills; and all we boys knew of their existence were tales told us by bibulous tramp machinists, who, wandering out in the then far west, filled us with wonder as we sat about the stove at noontime and listened to the tales they told of the big tools they had woork done at Matty Baldwin's, in the Allaire, the Secor, or Novelty works, or at West Point. But not alone were all these wanting in the old time shop, but as well were twist drills, except of the home made pattern, screw cutting machines, relieved taps, etc. while jigs, standard gauges, and reamers were either among the things not yet dreamed of or among those only hinted at as being possible in the far off machine shops of the millennium.

There was there, to be sure, the wabbling grindstone in the corner, above which hung the white lead keg, emptied of its paint, but filled with water which dripped on the revolving stone, graduated as to the quantity escaping by a loosely fitted pine plug in the bottom. In the center of the shop stood the cannon stove, about which was heaped up fortifications of ashes, coal dust, and shop litter, and around which the cub machinist, petticoat lamp in hand, skirmished at night, stumbling, and barking his shins against the broken horse power machines and corn shellers that lay in ambush for him in the darkness.

Those of you who have chosen mechanical engineering as a profess on, and who are to devise and direct the .vast engineering plants of the future, will never have among your experience anything akin to what all the older members of the profession have had, of the upright drill of the chalk age. You will never enjoy the luxury of hanging on the outer end of a scantling, the other end of which was under a beam, or the vise bench, and where between you and the beam a journeyman machinist, sitting on the floor with an iron brace and a flat drill, calmly and leisurly bored holes in a fire front or mended a broken casting. When I said calmly, I meant calmly, so long as the cub held the lever steadily, and the flat drill found no blow hole in the casting into which to drop in and stick fast; for when this eappened, the plate would slip out from under the scantling, the wimble, the lever, and the cub usually came down together in a pile on top of the prostrate journeyman, who, scrambling from out the wreck, and alternately nursing a jammed fiinger and rubbing a bruised leg, added briliancy to the tableau with the blue light of his profanity.

Neither will any of you ever enjoy the pleasure of being sent down with the workmen, some bitter cold winter morning, into the wheel house, to help chop out the old pitchback water wheel which the night before had locked its icy arms with the forebay. Neither, after this has been accomplished, will you have a distinct remembrance how, for days afterward, the old wheel would revolve with diminishing speed, until shafts, and wheels, and pulleys, all through the shop, would almost come to a standstill, until the ice-loaded side of the wheel had passed the top of its revolution, and then with gathering motion for a few moments everything would fairly buzz with unwonted speed as the loaded side goes down.

I am sure that no graduate of Sibley college will ever have any experience in cutting bolts and tapping nuts with the appliances of this by-gone age. As I before said, there were no bolt cutting and nut tapping machines in the old time shops of which I speak, and I never look upon one of these elegant and polished thread cutting machines, in which the severest labor of the attendant consists in lifting the bolt up on the machine, and gently turning a lever to clamp it in its jaws, and then push it forward until it comes in contact with the well shaped dies, which, under a stream of self pumped oil, cut on it a clean, smooth, and uniform sized thread, and which when finished is dropped into the sawdus bath below, but that I am reminded of the well named jam plate, of my youth, and the flat sided taper taps that kept it company.

The rule of the smith was to suage down the end of the bolt until it would enter the nut, and the barbarous screw jamming tools, aided by the strained muscles and the sweating brows of the apprentice boys, bruised and raise up a thread outside the bolt, and inside the nut, so they would fit together. So uneven were their sizes, that each bolt and nut were fitted to each other, and when taking down a machine, woe betide the fellow who got them mixed.

I find that my time will not permit a description of all the tools of the old machine shop ew and crude as they were.

The old bull lathe, with the wooden shears (iron strapped) and the slide rest, and hand turning tools that belonged to it, have either been changed beyond recognition or buried under the scrap heap of the past. Neither can I describe even a few of the innumerable contrivances we were compelled to made in order that our scant tools could be make to do work which the new and improved tools of to day would make nothing of doing. But all this had its value When every day brought a new necessity, each day as well brought a new device for its accomplishment, until the machinist who learned his trade in those days, and in shops that had but few tools, had resources of experience and of expedients that gave him courage to attempt almost anything. It is a great pity that there has not been preserved by means of cuts and drawings, some of these exceedingly ingenuions makeshifts in the way of impromptu boring machines, facing off tools, drilling apparatus, and screw cutting attachments on engine lathes, etc. Many of them were curiosities in which odd wheels picked out of the scrap heap, joined with jiggers of all kinds and shapes, tied with clamps and long bolts made to do service as short ones, by having strung on them as washers a lot of worn-out nuts the whole turned with a crank by hand, or by a rope, which, turning several corners, reaches somewhere a revolving pulley for the required power.

New and improved tools have done away for the necessity of such contrivances, and they have also done away, I fear, with the skill and ingenuity then required in the workman. There were giants in those days, in the way of workmen, who, with only a hammer, a chisel, and a file, could fit up in elegant style the strap joints and connecting rods which today come finished and polished from the machine tools without the aid of either. These were the days when the ways of lathes were chipped and filed, as were the guides for steam engines, and, indeed, all plain or dressed parts of machines.

I have not thus rehearsed the story of the "chalk age" simply to tell you what pluck, energy, and untiring industry then accomplished, but to give you an idea of the superior, advantages you who are now before me, and who are seeking to become skilled in the mechanic arts, possess over those who have traveled over this road before you.

If, with the same high aims, the same undaunted courage, you start on this journey, aided as you are by all these fortunate surroundings, there will be no reason why the coming engineers may not at the last lay down their work with the same feeling of satisfaction as do the engineers of the present, as they look back on what has been accomplished in the half century just passed. And need I say that if the world's progress is to be aided by a corresponding epoch of gneat inventions, if it is to have its civilization, its commerce, its industrial pursuits, as well as its education and the general welfare of all, advanced with the same steady, onward march in the years that are to come as it has had in the years that have gone, it will be to the engineers which the technical institutes, the manuel training schools, are to furnish, we must look for its accomplishment.

If you are inclined to think lightly of the task that is before you, if you are inclined to think disparagingly of the artisans and engineers of the past, and of what they have done, ust for a moment, think of what has been accomplished by them in the fifty years or so just gone

Of course, you cannot remember the time when there were no railroads, no locomotives no steamships, no telegrap wires on land or crbles under the sea, or scarce of the time when the telephone had no existence, except in the imagination of Shakespeare when he spoke "of airy sounds, that sylable men's names."

You can scarce conceive of the time when there wore not, as there now is, immense manufacturing establishment all over this land in which everything, from the most delicate screw within your watch to the most ponderous engine, is turned out by machinery. For a description of the time in which all these things wera unknown, you have not to listen to ihe "tales of a grandfather." Your fathers' remembrance will serve as well to enlighten you.

CONTINUED ON SEVENTH PAGE.

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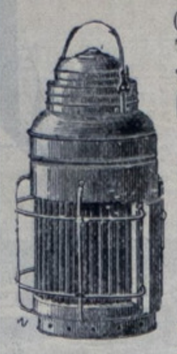

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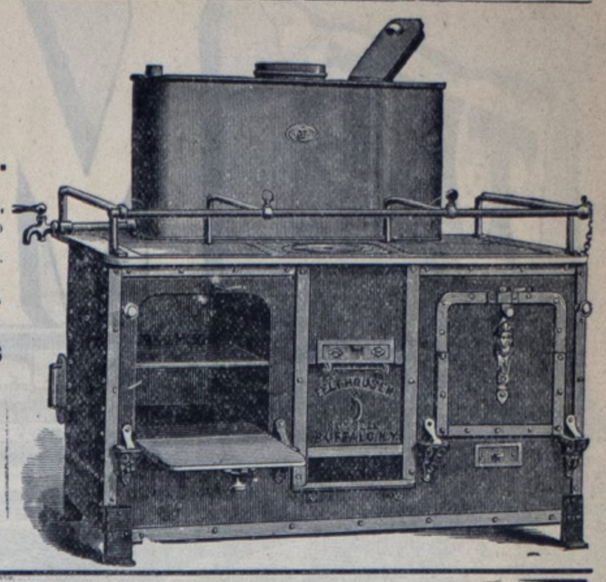

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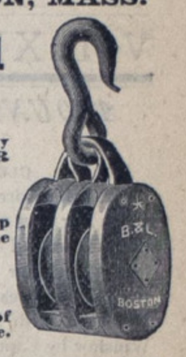

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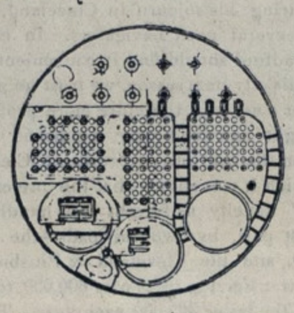

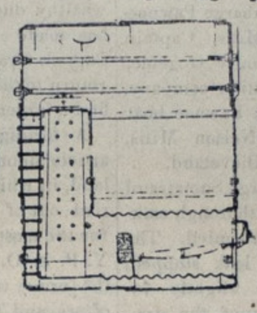

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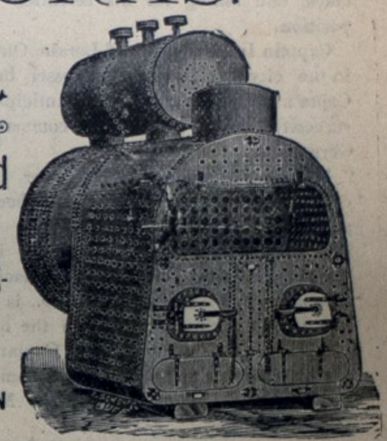

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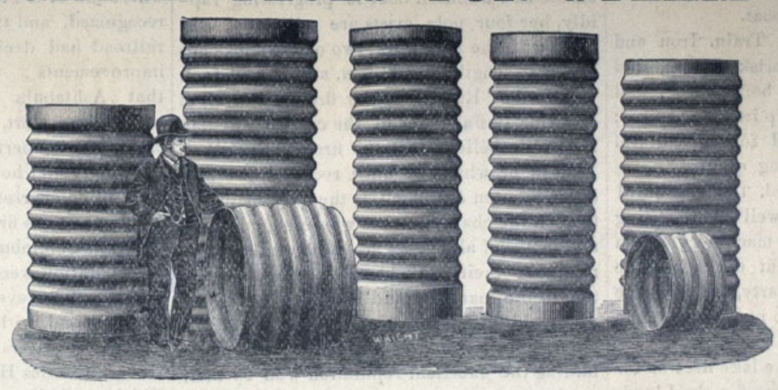

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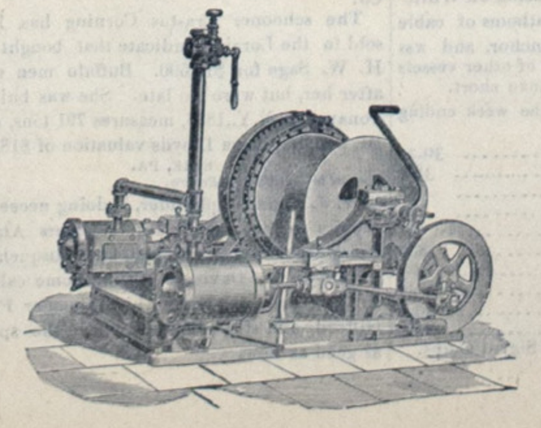

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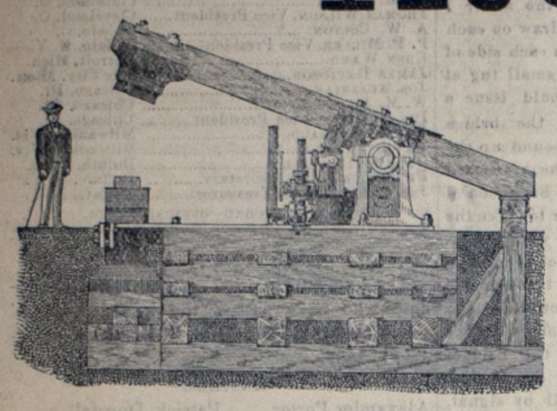

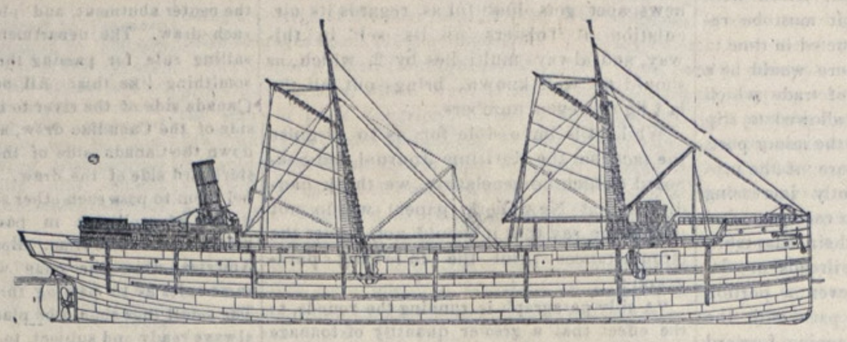

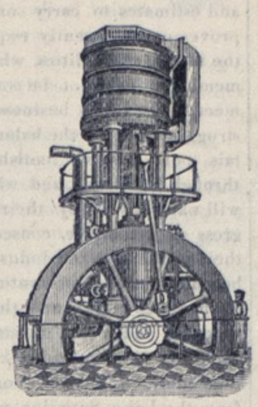

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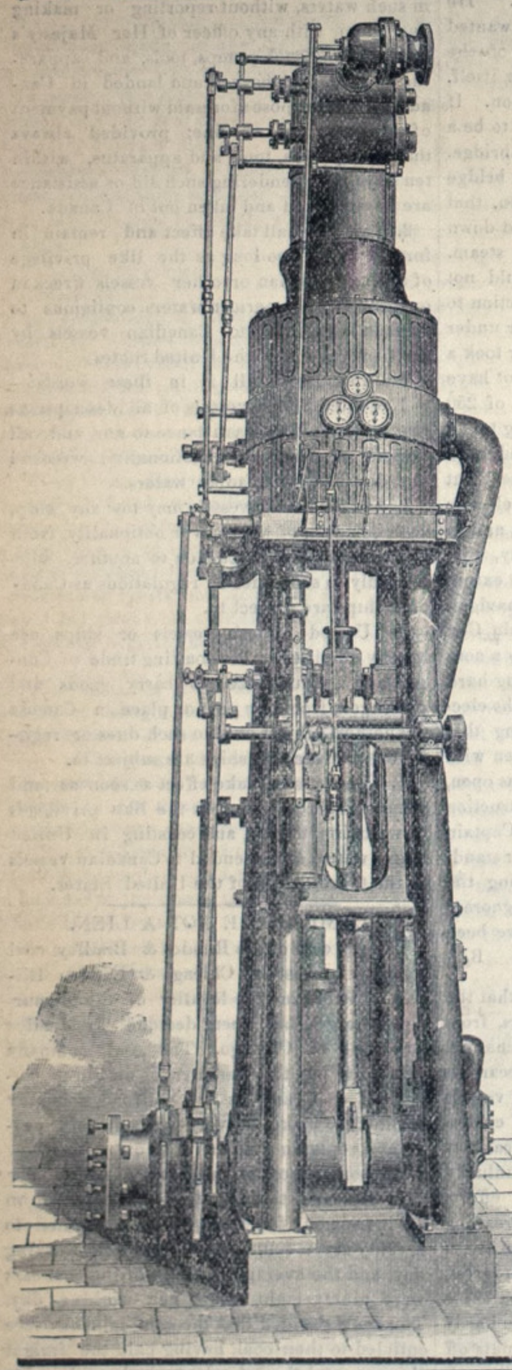

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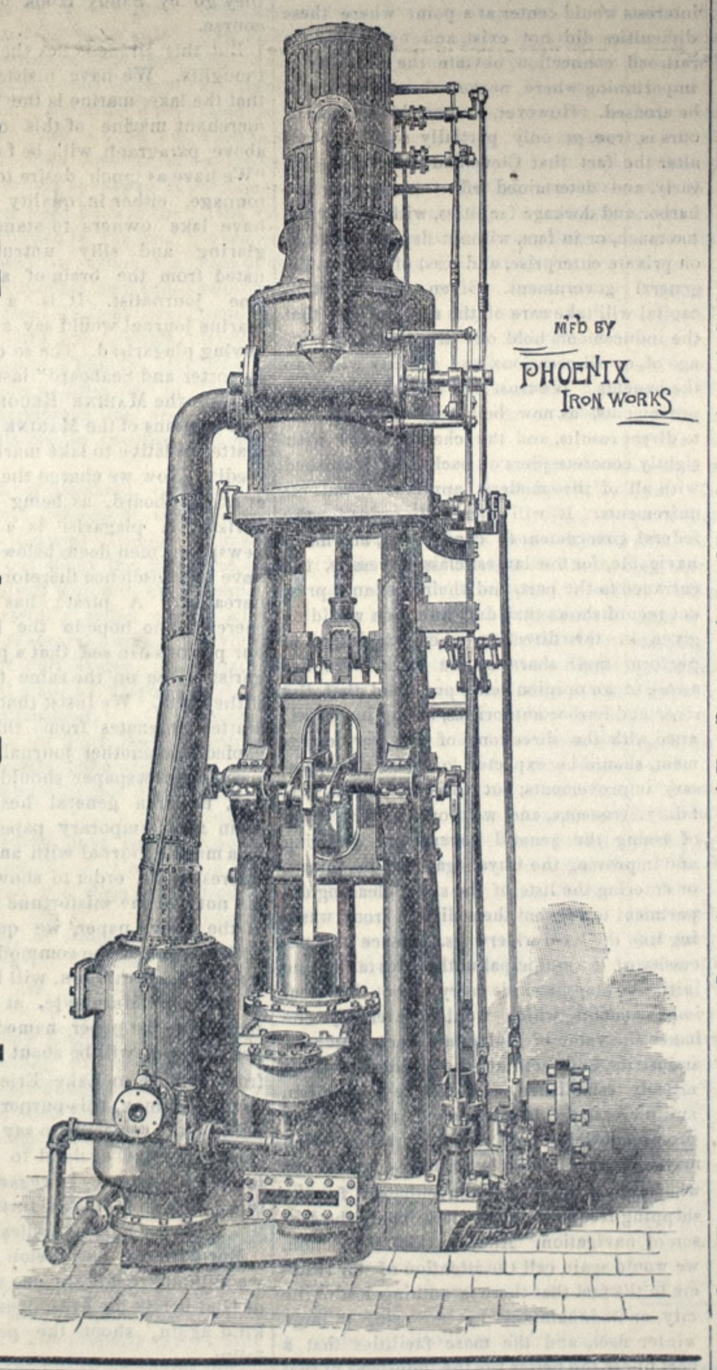

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MARINE RECORD—OFFICIAL PAPER.

CLEVELAND HARBOR.

The opening of the "old river bed" is now becoming a commercial necessity to the port of Cleveland, and it is to be hoped that the bill, recently before the committee on legislation, will be unanimously endorsed by all who hold the interests and welfare of Cleveland at heart.

Already too much time has been frittered away in useless talk, and barren schemes, while neighboring ports have risen from insignificance to a prominence in the vessel trade, and if this city will not avail itself of the natural advantages, and the business enterprises involved in the duties of a large and important lake ports then there is no alternative for commerce but to go elsewhere, and seek for the facilities which are denied here, with the assurance, in the meanwhile, that at the time a port loses her share of commerce, and control of the marine industry, she ceases to prosper, and the tide of progression sweeps past to more hospitable shores, where commerce, loaded with a rich argosy, is welcomed, and due regard paid to its requirements; at least such has been the experience of this, and other countries, and we cannot expect any alteration, or exception in the precedents established, in favor of Cleveland. Hence, not only should the river bed be opened, but large and commodious piers, built of concrete blocks, should surround the shore line, and railway switches run into each berth, so that vessels might meet with the dispatch so urgently demanded by the limited season of navigation. Verbal instructions have been given, letters written, and telegraphs sent to charterers, masters, and agents, not to take freight for certain specified ports, because of the detention, expense, and slow-going methods of doing business at those ports, and we should be ever on the guard at this, as well as other lake ports, that no such a charge could, reasonably, be brought home. It would be well to understand that maritime commerce, like fortune, is sometimes fickle, deserting, chiefly for cause, however, the most convenient port and harbor for one with apparently less conveniences; and to illustrate this line of argument, we might ask, what advantages, if any, does Fairport, or Ashtabula harbor have that Cleveland can not produce, or in other words, why should the imports of Toledo, Lorain, Fairport and Ashtabula, all situated, as is well known, in the state of Ohio, increase in iron ore on an average from 13 to 50 per cent. and Cleveland's deficiency go to swell the aggregate list at these points? Simply, and honestly because this port does not offer the inducements, and the dispatch necessary to hold the trade of iron ore and coal carriers.

Although the above seems rather a disgraceful admission of commercial incompetency, yet the facts are fully borne out by the tonnage statistics of last season, and will be reproduced the coming season, unless legislation is brought to bear on the question, and a fitting sum guaranteed to make the necessary surveys, and estimates to carry on the work of improvement so urgently required. Even with the increased facilities, which it must be remembered can not be constructed in time to meet this season's business, there would be a struggle to regain the balance of trade which this port has so foolishly allowed to slip through her hands, and while the minor ports will naturally enjoy their share of the progress of commerce, consequently increasing their population, and industries each year, and becoming more important as their adaptability becomes known and the railroads are developed. This city, to retain even a portion of her commerce, and to keep pace with the now enormous output of ore coming forward from the Lake Superior mines, must launch out a liberal sum of money, to carry on improvements in order to facilitate the movements of the large tonnage engaged in the trade.

We are just now witnessing the truth of the old adage, "what is everybody's business is no one's," and in no more direct way can this be applied, than to the harbor of Cleveland, which at times has even been allowed to go undredged until vessels of an ordinary draft could not enter the port without the danger and consequent delay and expense incident to grounding. At other times suggested improvements have met with a spasmodic encouragement, and then allowed to drop out of sight; discharging and loading appliances have been structures in use when the ark was freighted, and with a general lack of interest, "nobody's business," has landed the port behind its trade and the times. In point of fact, we are not certain but that Cleveland capital has been liberally invested in the development of adjacent ports, and a very natural sequence too, if as we surmise, capitalists had found local corporations slow to move, and dificult of approach, their attention and interests would center at a point where these difficulties did not exist, and by forming a railroad connection obviate the necessity of importuning where no actual interest could be aroused. However, wether this surmise of ours is true, or only partially so, it can not alter the fact that Cleveland must make an early, and determined effort to improve her harbor and dockage facilities, without relying too much, or in fact, without depending at all on private enterprise, and least of all on the general government. Given the facilities, capital will take care of the rest, and see that the inducements held out are taken advantage of on all occasions, and the city will reap the benefits. We trust that this matter of improvements, as now being agitated, will lead to direct results, and the channel made with sightly concrete piers on each side, furnished with all of the modern appliances and requirements. It will then be in order for the federal government to dredge out, and make navigable, for the largest class of vessels, the entrance to the port, and their past and present record shows that due attention would be given in this direction when called upon to perform their share of the work. We are aware of an opinion being prevalent that the river and harbor authorities, acting in accordance with the directions of the war department, should be expected to make the necessary improvements; but this opinion is certainly erroneous, and we would as soon think of seeing the general government dredging and improving the Cuyahoga from its source, or entering the lists of the street cleaning department to prevent the sediment from washing into the local waterways. Hence the necessity of the municipal authorities taking the initiative steps towards carrying out the local improvements, which would materially enhance the value of real estate, encourage new industries, and facilitate the business of those already established, add to the population, and increase the importance of the city as a prominent lake port, each, and all of which may be brought about by forming commodious wharves, and general conveniences for the shipping frequenting the port during the season of navigation. And, in this connection, we would again call the attention of our readers to the fact that there is nothing lost to the city, or its inhabitants by harboring a large winter fleet, and the more facilities that a port offers the better for the industries of that port. From this showing it may be argued that alterations in dock property fronting, adjacent, or connected in any way with a navigable water-course, ought to be constructed under the supervision of the municipal officials and strict attention paid, to the proposed plans of alteration, so that no infringement of the rights, or anything derogatory to the welfare of the city, could be carried out in the interests of a corporation, or a private firm, who might possibly be careless of the general interests involved. In any case the city must not shirk its responsibility in introducing new and desirable improvements at an early date, and assisting in every possible manner, the well planned additions and alterations emanating from other sources.

A CONGLOMERATED JOURNAL.

The Maritime Reporter and Seaboard challenges a comparison of its subscription books with those of any paper devoted to maritime interests.

This is referring to the same old chestnut that an old Cleveland paper knocked down some time since. That one had no burrs on it, however, and when the challenge was accepted, another Cleveland paper scooped in the whole business. The above paragraph in italics is a parallel case. When a newspaper gets doubtful as regards its circulation it bolsters up itself in this way, and always multiplies by 2, which, as should be well known, brings out all the last figures even numbers.

While it is impossible for us to disguise the fact that the Maritime Journal and Seaboard (which nomenclature we think handicaps that New York paper) we do not hesitate to say that it should not, under the circumstances print the following paragraph:

"A silly paragraph is running the rounds, to the effect that a greater quantity of tonnage passes Detroit than the sum total of the tonnage leaving this port of New York by way of Sandy Hook, for coastwise and European points. We have as much desire to disparage lake tonnage, either in quality or quantity, as have lake owners to stand sponsor for a glaring and silly untruth, that emanated from the alleged brain of a would-be marine journalist, but the fact is, that the registered and unregistered tonnage of New York is something enormous, and must be conceded to be far in excess of both the American and Canadian tonnage passing the great lake port."

Chump is not an intellectual word. But it is one very expressive. A chump is an editor who means one thing and says another. All captains and engineers will know the animal when they see it. Well, we must hold that the author of the above paragraph is a chump. He says, and we take it to ourselves, "that greater tonnage passes on Detroit river", quoting from an article that appeared in the MARINE RECORD two weeks since, than that "leaving the port of Sandy Hook." Now it is our province to insist that there is a greater number of boats clearing from Chicago than from New York, it matters not whether they go by Sandy Hook or by any other course.

But this tirade is not the burden of our thoughts. We have insisted and do insist that the lake marine is the backbone of the merchant marine of this country. In the above paragraph will be found the lines: "We have as much desire to disparage lake tonnage, either in quality or quantity, as have lake owners to stand sponser for a glaring and silly untruth that emanated from the brain of a would be marine journalist. It is a shame that a marine journal would say such things after having plagarised. The so called "Maritime Reporter and Seaboard" last week re-printed from the MARINE RECORD not less than two columns of the MARINE RACORD'S news matter, relative to lake marine, without any credit. Now we charge the Marino Reporter and Seaboard, as being pirates and plagarists. A plagarist is a character that newspaper men deem below contempt; they have no conscience therefore no hope in the hereafter. A pirate has no conscience therefore no hope in the hereafter. Now our patrons can see that a pirate and a plagarist are on on the same terms or footing if they will. We insist that whatever news matter emanates from this office and is copied into another journal that calls itself a marine newspaper should be ashamed to put, under a general head matter taken from a contemporary paper, that would be a marine journal with an itching for lake interests. In order to show any one who has not had the misfortune to see the work of the above paper, we quote: "Iron ore which is one of the commodties most looked after by lake carriers, will be shipped from Buffalo to Marquette, at $1.25. In the same issue the paper named thinks that the price of coal will be about 80 cents per ton from Duluth to Lake Erie ports. But to cap the climax, this purported marine journal has the temerity to say that coal will be carried from Cleveland to Lake Erie ports for $1.25 per ton. In regard to these matters, all we have to say further is:

"Shoot folly as it flies."

But with the permission of our readres we will add that if any one without the fear of God before his eyes, does anything of the kind again, shoot the perpetrator of the folly.

THE members of the British naval reserve for which provision is annually made in the estimates are 18,000, viz, 10,000 seamen, and 8000 fisherman.

WHO invented the screw propeller? Captain George Beardon, R N., who has just died at his home in England, claimed that he did, and for a considerable period before the invention was generally utilized he had a boat propelled by a screw plying on the river in his neighborhood. The deceased gentleman, who was born in 1810, entered the British navy in 1825, and saw considerable service.

THAT DETROIT BRIDGE.

Captain A. A. Cox, of Port Huron, master of the steamer Tom Adams, and one of the most experienced of river navigators, writes thus of the proposed bridge over Detroit river:

"I don't see that a bridge would be a very serious obstruction to the navigation of the Detroit river, inasmuch as nine tenths of the boats that pass either up or down are propelled or towed by steam. I have towed a good many tows of all descriptions up and down, and never had a tow yet that could not pass through a bridge with a span draw of 250 feet. A raft would be the worst to get through, but a very wide raft, with the additional assistance of two harbor tugs, could be towed through easily enough. If I were at the head of the affair I would recommend that they put a draw on each side of the river, with 250 feet on each side of the center abutment, and place a small tug at each draw. The department should issue a sailing rule for passing through the bridge somthing like this: All boats bound up the Canada side of the river to take the starboard side of the Canadian draw, and all boats bound down the Canada side of the river to take the starboard side of the draw. That would compel them to pass each other so as not to involve a risk of collision in passing through the bridge at the same time. Boats should use the American draw the same way and with the same rules as to passing through the bridge. The small tugs should be placed at the bridge, always ready and subject to a call by signal, and their services to passing craft be given free. With a bridge and draws of above dimensions, two tugs to assist rafts and long tows and sail craft, with adverse and light winds, in passing the draw, I cannot conscientiously say that I think a bridge across the Detroit river would be a very serious obstruction to navigation."

But would not a tunnel be of more service to the railroad interests, and less objectionable to the vessel interests, than even such a bridge, so regulated? A Detroit contractor stands ready to construct a satisfactory tunnel for $1,000,000. A bridge would cost about as much.—Buffalo Courier.

IS THE DETROIT RIVER BRIDGE AN OBSTRUCTION.

To the Editor of the Marine Record.

Dear Sir—In the Detroit Free Press of February 8, 1889, there appeared an article headed, "Bridge no obstruction." Said article purports to be the views of Captain A. A. Cox, upon said subject. Captain Cox was evidently been approached by some one interested in the bridge scheme, and influenced to give an opinion beneficial to said scheme. Note the heading; "no obstruction." In the article you will see Captain Cox modifies this by saying, "not very serious obstruction." He seems to want to please some one that wanted to have his opinion published in favor of the bridge, but the wording of the article itself, shows that he considers it an obstruction. If not, why does he say that there ought to be a tug stationed at each draw of the bridge. Captain Cox gives as a reason why a bridge would not be a very serious obstruction, that nine-tenths of the boats that pass up and down the river are propelled, or towel by steam. How about the other one tenth? Would not such a bridge be a very serious obstruction to the one-tenth that navigates said river under sail? Captain Cox states that he never took a tow through the rivers that he could not have taken through a bridge with a draw of 250 feet. The writer will vouch for having taken a tow through the river when he needed more than half the river, (more than 260 feet), but Captain Cox also knows that since the electric lights have been placed on Belle Isle, and in Walkerville, and all over Detroit city, that said lights upon fair nights to a certain extent blind the eyes of masters and pilots, navigating said river. How is it with Captain Cox when he is bound up Detroit river with a consort in tow, wind up the river, blowing hard and raining, and the night dark, with the electric lights to blind him, and knowing that there was a bridge across the river, even with 1000 feet draw, and knowing that it was open, would he not consider it a serious obstruction under such circumstance? If not, Captain Cox's case must be similar to one farmer standing against the other twelve, he being the wise one, and the other eleven the ignorant ones, notwithstanding there may have been as successful masters as Captain Cox. B.

IT is not perhaps generally known that the fisherman and boatmen of Broadstairs, from which point the Anglo-French cross-channel cables start, add to their scanty and precarious incomes by going to the assistance of vessels whose anchors get entangled in the cables. Every vessel which drags a telegraph cable is liable to a heavy fine, and when an unlucky craft gets into such a difficulty its first efforts are occasionally directed towards breaking away at any price. If one happens to see a ship full sails set, but making no progress, one may be sure that she has caught a cable and is illegally trying to break it. The hardy and adventurous boatmen thereupon puts off to her, and after ascertaining her name, advises her captain to let his anchor go, or else he will be delivered over to the hands of justice. It is very rarely that advice so disinterested is rejected. Away goes the anchor, and away goes the vessel, whereupon the boatman, who knows this part of his business extremely well, proceeds to fish up the anchor and make off with his prize.

The dividends paid by the copper mines of Dakota last year amounted to $7,880,270. The ores are the same as those of the Algoma district across from here.

LAKE CARRIERS' ASSOCIATION

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARACTER OF THE SERVICE RENDERED TO THE PUBLIC TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS AND PROMOTE THEIR GENERAL WELFARE.

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MARINE RECORD—OFFICAL PAPER.

LICENSES ISSUED.

The following is a list of successful candidates who have passed the local inspectors' examination at Cleveland, Ohio, since January, 1, 1889.

MASTERS.

Alexander Porter, Patrick Dowdell,
Lucien H. Wilcox, Lyman B. Woodruff.

FIRST-CLASS PILOTS.

August Brant, Levi A. Miskin,
Lewis Brick, Wm. H. Porcupile,
Flint Nichols, John B. McManus,
Chas. A. Benham.

SECOND-CLASS PILOTS.

Miles H. Beebe, Philip Quick,
Jesse Brooks, George E. Norman.

SPECIAL ENGINEERS.

John Hagemar, Adolph Stein,
J. Albert Young, Wm. J. Tuft,
Francis C. Tuft.

ASSISTANT ENGINEERS.

George F. Turner, John P. Klasen,
James Williams, Levi Walder,
Patrick Murphy, John Ferguson,
Joseph Morrow.

CANADIAN WRECKING BILLS.

The following is the text of the bills now before the Dominion Parliament, on the wrecking questions, Mr. Kirkpatrick's bill reads thus:—

1. Foreign vessels of all descriptions, with or without wrecking pumps, tools, and apparatus, may enter Canadian waters contiguous to the United States, and render aid or assistance to foreign or other vessels wrecked or disabled in such waters, without reporting or making entry to or with any officer of Her Majesty's Customs; and such pumps, tools, and apparatus may be disembarked and landed in Canada for the purpose aforesaid without payment of any duty, fee, or fine; provided always that such pumps, tools and apparatus, within ten days after rendering such aid or assistance are re-embarked and taken out of Canada.

2. This act shall take effect and remain in force when and so long as the like privilege of aiding Canadian or other vessels wrecked or disabled in American waters contigious to Canada is extended to Canadian vessels by the Government of the United States.

Mr. Patterson's bill is in these words:—

1. United States' vessels of all descriptions may render aid and assistance to any and all vessels, of whatsoever nationality, wrecked and disabled in Canadian waters.

2. United States' vessels may tow any ship, vessel, or raft, of whatsoever nationality, from one port or place in Canada to another, subject only to such dues or regulations as Canadian ships are subject to.

3. United States' vessels or ships are hereby admitted to the coasting trade of Canada, and are authorized to carry goods and passengers from one port or place in Canada to another, subject only to such dues or regulations as Canadian ships are subject to.

4. This act shall take effect as soon as and remain in force so long as the like privileges of wrecking, towing, and coasting in United States waters are extended to Canadian vessels by the Government of the United States.

DEMURRAGE NOT A LIEN.

The test case of the Rhodes & Bradley coal company against the Chicago & Eastern Illinois to determine the legality of the demurrage charges has been decided by Justice Bradwell of Chicago. The coal company refused to pay the demurrage on three carloads of coal, and as the railroad company declined to make delivery without said payment a replevin writ was sued out. To show the reasonableness of the charge of $1 per day, witnesses testified that the interest on the investment for track room amounted to seventy-seven cents per car for each working day, and the average earnings of the coal cars were ninety-eight cents per working day. The court decided that the complainants were entitled to their coal, having paid the freight thereon, and the defendants had no lien on the coal for the demurrage. If the railroads suffered any damages by reason of the delay to the unloading of the cars, its remedy was an action for debt or damages. An appeal has been taken by the railroad company.

The Kirkpatrick wrecking bill, allowing American vessels to rescue vessels in distress in Canadian waters, has passed the second reading in the Canadian House of Commons and has gone to a special committee for further consideration. It is generally supported by leading members.

AROUND THE LAKES.

[CONTINUED FROM PAGE 1.]

DETROIT, MICH.

The Seamen's benevolent association, at which representatives from Milwaukee, Oswego, St. Catharines, Chicago, Buffalo and Detroit were present, closed their eleventh annual session last night. The receipts for last year were $5,654.50, out of which $2,909 were paid for sick benefits and $455.50 to shipwrecked and destitute members. Added to this, amounts paid for funerals and other expenditures make a total of $5,339.68, leaving a balance on hand of $314.82.

The association decided to petition congress at its next session to take active measures against overloading of vessels. A resolution was passed recommending a conference with vessel owners before the opening of navigation for the purpose of arranging terms for the coming season's work. The association also decided to organize two branches in Canada and one on Lake Erie during the coming season. The Detroit branch will be reorganized. Members of the executive board for 1889 will be as follows: Alex S. Killow of Oswego, William Thomas of Buffalo, Walter M. Groves of Chicago, John T. Carey of St. Catharines, and Daniel J. Robertson of Chicago.

The steamer Stewart will, upon the opening of navigation, run daily trips between Port Hope and Detroit.

We take pleasure in recommending the Mount Olive Erasive Liquid, manufactured by Captain D. A. McLachlin, for cleaning varnish and painted articles, without injury to the polish. Price 40c per gallon. Address the Captain at No. 633 Trumbull avenue, Detroit, Mich.

The new Michigan Central car ferry Transfer is showing itself to be an excellent ice boat. She beats the Michigan Central about twelve minutes in making the crossing when the ice is heavy.—*Exchange.*

MILWAUKEE, WIS,

The propeller, John Rugee, built in Milwaukee in 1888 by the Milwaukee Shipyard Co., and owned by J. Fitzgerald and others, has been sold to Ogdensburgh people; consideration $90,000. The John Rugee is 960 tons register, has a capacity of 63,000 bushels of corn, and is rated A1*.

We notice that her classified valuation is $80,000, and the change of ownership would argue an increased valuation of vessel property, since some of the recent transfers.

CHICAGO, ILL.

The following appointments for the season of 1889 have been made on the Northern Michigan Line: Steamer City of Charlevoix—Captain, Ira Bishop; first mate, Joseph Boyd; chief engineer, A. C. Bowen; clerk, James P. Walker; steward, Edward Bassett. Steamer Lawrence—Captarn, William Finucan; first mate, Thomas Woods; dhief engineer, Joseph H. McLary; clerk, George E. Bond; steward, Thomas Healy.

SANDUSKY, OHIO.

Special to the Marine Record.

J. E. Monk, shipbuilder, is building a side wheel steamer for Andrew Wherle & Co.; her dimensions are 157 feet overall, 26 feet beam of hull, with concave sides, making her outside of guards 40 feet beam, and 9 feet depth of hold. She will have a low pressure engine 7 feet stroke, with a 40 inch cylinder and boiler 9 feet diameter, 16 feat long. She is a very handsome model and will be fitted out with all modern improvements for the comfort and convenience of passengers. She is to run to Marble Head, Lake Side and Catawaba Island, and to take the place of the steamer Ferris, now too small for the business. J. E. Monk has the barge Iceman on his drydock and is giving her a thorough rebuild.

Captain J. C. Estes is giving his propeller Ohio new decks of Georgia pine, and a general overhauling. Captain Estes has appointed Captain —— to his propeller Ohio, Captain Chas. Miller to his propeller Yosemite, Captain Chris. Peterson to his schooner Lyon. The Yosemite and Lyon are chartered to Potter, Burdsell & Co., of Cleveland, for the season to bring 6,000,000 ft. of lumber from Lake Superior, and the remainder of the season to bring lumber from Lake Huron ports.

Captain J. C. Estes and P. G. Walker, of the Third National bank, have become partners as general vessel brokers and agents, and marine insurance and collections.

The steambarge H. C. Schnoor is receiving a general overhauling by Merrick & Byriel, under the superintendence of W. H. Herbert, her managing owner, and will come out in first-class shape when navigation opens. Captain Wm. Duff will command her.

John Homegardner's steamer Josephine is receiving a big rebuild,

The side wheel steamer City of Sandusky, Captain George W. Brown, has received part new stern, some new ironing, and her decks calked.

The steambarges Nevada, Empire, Chauncey Hurlburt, and consorts Burt and Clint, and the steambarge Leland, which was burned at Huron last fall, have all been purchased by parties here this winter.

The steamer American Eagle, Captain F. A. Magle, is making regular daily trips between Sandusky and the islands.

MARINE CITY, MICH.

The rebuild being given the Sea Gull will probably be completed about the first of May

The work of planking the bottom of the boat at Morley's yard is nearly completed.

The new steamer at Holland's is fast nearing completion, and will probably be launched as soon as the ice moves out of the river.

The report that Simon Langell had bought or leased what is known as the King shipyard in this city, is declared to be entirely without foundation by those who would know if any such transaction had taken place.

THE LAKE LEVEL.

KENOSHA, WIS. March 1.

To the Editor of the Marine Record.

Dear Sir—I enclose herewith the essential part of the bill introduced into the legislature of Illinois, and called the drainage bill. I sent your editorial remarks in reference to that work to the Kenosha Union, with some introductory remarks, and also send that paper to you.

WHEREAS, It is contemplated to increase the volume from Lake Michigan to 300,000 cubic feet per minute within a few years, and ultimately to add 600,000 cubic feet or more, thus enabling a large depth for navigation to be obtained by an improved channel, and that said channel will be self sustaining and self-improving, discharging flood waters more readily and benefit the bordering lands and the healthfuless of the valley.

WHEREAS, Works now projected by the city of Chicago will form part of a waterway of large proportions from Lake Michigan, via the Desplaines, and Illinois rivers to the Mississippi river, of which the dams and locks upon the alluvial section of the Illinois river can form no part, and which, if allowed to remain, will increase overflow and be detrimental to the welfare of the Illinois valley, and the interests of the state, Therefore, be it

Resolved By the senate, the house of representatives concurring therein. 1. That it is the policy of the state of Illinois to secure the construction of a waterway of the greatest practicable depth and usefulness for navigation from Lake Michigan, via the Desplaines and Illinois rivers, to the Mississippi river, and to encourage the construction of feeders thereto of like proportions and usefulness.

2. That the United States is hereby requested to stop work upon the locks and dams at La Grange, and Campsville, and to apply all funds available and future appropriation to the improvement of the channel from LaSalle to the mouth, with a view to such a depth as will be of present utility, and in such manner as to develop progressively all the depth practicable by the aid of a large water supply from Lake Michigan at Chicago.

3. That the United States is requested to co-operate with the city of Chicago in the construction of a channel not less than 160 feet wide, and 24 feet deep, with such a grade as to give a velocity of three miles per hour from Lake Michigan at Chicago to Lake Joliet, a pool of the Desplaines river, immediately below Joliet, and to project a channel of similar capacity and not less than 14 feet deep from Lake Joliet to LaSalle, all to be designed in such manner as to permit future development to a greater capacity.

WE of the nineteenth century must not take all the credit of enterprise and discovery upon ourselves; illustrative of this it is interesting to find one of the oldest Greek writers near 2,500 years ago, explaining to the primitive vessel owners of his corner of the Mediterranean, that large vessels paid better than small ones. So that business men in that early time were not quite so ignorant as we sometimes think. Jonah it will be remembered paid his fare in advance, and the owner of the modern steamer does not require much more than this from his passengers. The old time vesselmen had likewise laws of general, and particular average, regulating their insurance, not by any means unlike those of to-day. The grain ships which in the course of the following centuries carried the corn of Egypt to Rome, were of very large size. One of these, it will be remembered, in which St. Paul was wrecked carried 276 souls besides her cargo of wheat. On the decline of the Roman empire, the average size of vessels went down very rapidly and remained so till comparatively recently. Of late years we have continued to turn out shipping from our lake yards, which quite beats the record of the palmiest days of Tyre, Carthage, or of Rome. The custom of sheathing vessels trading to warm climates, with yellow metal, or copper, re-introduced in modern times, was not unknown to the ancients, only they were obliged to substitute lead, which however, is not a very satisfactory artscle for the purpose.

THE Canadian Marine Department has given notice of a newly discovered rock in Georgian Bay, with only eleven feet of water on it. This will be known as the McNab rock. It lies east half south of Surprise Shoal, and is distant a little more than half a nautical mile from the buoy on the latter. At McNab rock, Cape Croker is in line with the middle of Griffith's Island, and the west extreme of Barrier Island is under the foot of the high bluff of Cape Dundas. A vessel passing northwestward of both these dangers should keep the whole of Griffith's Island open off Cape Croker. The line joining Cabot Head and Cape Croker leads inside, or southwest, of the same. This shoal has two patches, the northeast one going by the name of McNab rock, and which bears by compass north by west one half west, six and one half nautical miles from the northeast extremity of Cape Croker. Griffith's Island shut in altogether leads inside, and the whole of the island open off Cape Croker leads outside the whole patch.

FORE AND AFT.

The schooner Minnehaha is one of the boats chartered at Chicago for wheat to Buffalo at 3¼ cents.

Frank Perry has disposed of all of the Starucca cargo which he bought at auction last week. It netted him a nice profit.

Captain Wilson, formerty in the Anchor Line, will sail the steambarge Fedora, being built at Bay City for O'Brien, Carter, and others of Erie.

Captain Thomas Sloan has bought an interest in the schooner H. C. Richards and will sail her.

The Marinette Eagle reports that the H. Wetbeck company recently closed a contract for furnishing Holland, Graves & Montgomery of Buffalo with 18,000,000 feet of lumber, being a portion of the next season's cut. The price averages about $15 per thousand.

The property taken from the wreck of the propellor Starucca, which went to pieces on the shore of Lake Superior, between Whitefish Point, and Grand Marais, late in the fall, was sold at public auction at Sault Ste. Marie, Frank Perry of that city secured the property for $4,250. The Reid wrecking company undertook the contract of relieving the Starucca, but only succeeded in lightering a part of the goods, which were towed to the Soo. For this service they libelled the property, and forced the sale by the United States Marshall.

At Sandusky clerk Ricks of the United States Circuit Court in the Cleveland district is acting as referee in an admiralty case of considerable interest. E. H. Zurhorst, one of the owners of the steamer Roland. began suit against the D. J. Brown manufacturing company to recover $900, alleged to be due for towing rafts. The Brown company hut in a counter claim for $700 for the loss of a raft which was in tow of the Roland en route from Canada, and which broke up off Kelly's Island. There are about 100 witnesses in the case.

It can easily be seen how the commerce of the United States is carried on from the following statement of Mr. William E. Ferguson, the statistician of the New York produce exchange. He says that last year 754 vessels carried grain from New York "to feed hungry Europe," and only three of these vessels bore the stars and stripes. British vessels carried 15,974,429 bushels of grain; the three American steamers carried 167,335 bushels of grain! So much for American ships at the great port of the United States. Mr. Ferguson further shows that whilst in 1887 there were 74 sailing vessels, which carried grain from New York, last year only 16 ships sailed thence grain laden. In the first of these years there was one American sailing vessel amongst the 74, she was named the Wandering Jew; but she has wandered away, and in 1888 no American ship took grain from New York. The three ships referred to in the above as bearing the stars and stripes were built in the United States but are now owned in England.

Sale has just been closed in which the ownership of the steamer Keystone, and consort J. G. Masten passes from Thomas Axworthy to Messrs. F. B. Case, of Norwalk, and others. The consideration is $54,000. It is understood the new owners will run her in the same line of trade as heretofore, iron ore, coal, grain, etc. Both boats are in excellent condition.

Captain L. B. Woodruff, of Sheffield, has just bought a one-sixteenth interest in the new boat being built by Craig at Trenton. The new purchase will be out about the first of June, and Captain Woodruff will sail her. The captain has successfully sailed the schooner E. R. Williams for several years.

Captain L. L. Slyfield, of Port Huron, has sold the schooner Mineral State, to Captain Somerville and others, of Cleveland.

H. E. Runnels and others, of Port Huron, have bought the barge Favorite. She will go behind the steamer Cleveland with the Stewart and Tyson.

Penoyer Bros. of Port Huron, have bought the barges Lillie May and R. J. Carney. The steambarge Torrent will tow them next season.

Captain John Connors, of Chicago, has bought an eighth interest in the schooner T. P. Sheldon, and will sail her. Captain H. Cummings was the seller.

Foreign capatilists, mainly English, have $8,450,000 invested in mining in Montana, which paid $12,226,842 in dividends last year. The railroads in Montana state that seventy-five per cent of their earniugs is derived from the mines.

Mr. Wells, of the Cleveland yacht Sylvia, is taking in Buffalo and Toronto to get some pointers for the new club house to be built by the Cleveland Yacht Club.

The Kennedy-Everett company, of this city, are sinking a shaft on their claim on the Spanish river this winter. The property evidently holds valuable deposits of copper ore.

The Toronto mining company have taken out of their location on Lake Wahnapitae twenty tons of ore to smelt in New York as a test. They have found native gold near the surface of the vein. This claim is about the same distance north of Sudbury as Denison is south of it, which shows that the gold bearing belt is at least forty miles wide there but narrows as it runs westward to Batchewana Bay where it dips under the lake and comes out at Ishpeming again.

OUR NAVAL FORCE.

The annual register of commissioned and warrant officers of the United States Navy just issued shows the aggregate number of men on the active list of the navy to be 1,514, of whom 1,336 are commissioned and 178 are warrant officers. The commissioned officers include one admiral, one vice-admiral, six rear admirals, ten commodores. who are designated as flag officers, forty-five captains, eighty-five commanders, seventy-four lieutenant commanders, two hundred and fifty lieutenants, seventy-six lieutenants (junior grade), one hundred and eighty-one ensigns, seventy-two naval cadets, performing two years' sea service prior to final graduation, fifteen medical directors, fifteen medical inspectors, fifty surgeons, fifty-eight passed assistant surgeons, thirteen pay directors, thirteen pay inspectors, forty-three paymasters, twenty-three passed assistant paymasters, fourteen assistant paymasters, seventy chief engineers, seventy-eight passed assistant engineers, sixty-eight assistant engineers, twenty-four chaplains, twelve professors of mathematics, two secretaries, seven naval constructors, fourteen assistant naval constructors, and sixteen civil engineers. In addition there are two hundred and thirty-two cadets on probation at the naval academy. In the marine corps there are five on the general staff, one colonel, two lieutenant-colonels, four majors, twenty captains, thirty first lieutenants. and thirteen second lieutenants. In the list of warrant officers are thirty-three boatswains, thirty-six gunners, forty-nine carpenters, twenty-nine sailmakers, and thirty one mates.

During the year there were 46 resignations, 11 retirements, 45 deaths, two of which were among the marine officers, 2 were dismissed, and 9 cadets were honorably discharged.

The servicable vessels include: first-rate, 5; second-rate, 13; third-rate, 42; fourth-rate, 7; tugs, 12; sailing vessels, 12; unservicable vessels, 6.

TBADE WITH CANADA.

Representative Baker, of Rochester, N. Y., has presented a bill amplifying a previous measure proposed by him, and aiming to regulate the commerce between the United States and foreign countries, with specific mention of Canada. This bill was referred to the committee on ways and means, and Mr. Baker expresses some hopes that it will be reported and passed this session, a number of senators having endorsed it. Its scope is evidently one of retaliation in the event of pending legislation in the Dominion. "It means," said congressman Baker, "to provide power in our own departments to reciprocate in kind in case of any unfriendly measures being carried at Ottawa, as is now threatened. It is calculated to meet emergencies that promise to arise in our Canadian relations. No aggressively unfriendly legislation is contemplated or desired by our people affecting our relations with Canada, only so far as is necessary to put ourselves in a position to retaliate in case of the passage of hostile bills by the Dominion parliament. Our people feel that the pending Boyle bill across the border is intended as a means of practically freezing out American nursery interests, and other manufacturtng interests of the States are also proposed to be seriously crippled by proposed legislation."

In its preamble the Baker bill recites how the Dominion, by proclamation of April 13, 1888, admitted free of duty green fruits, certain seeds, trees, shrubs, plants, and vegetables, all specifically described, but now contemplates a restoration of duties on all these articles, and there is exhibited a disposition to favor other legislation of a hostile character, culminating in the introduction of the Boyle bill, which places the sale of nursery stock grown by American nurserymen under certain restrictions and regulations with the intention of excluding them from Canada, thus crippling an important branch of American industry. Furthermore, by recent legislation, Canada has imposed an increased export duty on pine saw-logs and round unmanufactured timber with the intention of making the exportation of this merchandise prohibitory.

FREIGHT OUTLOOK.

It has been rumored that a small parcel of iron ore has been placed at 70 cents from Escanaba to Chicago, all charges paid, except the trimmer's bill, but up to the present we have not received the names of the charterers. $1.10 is offered from Escanaba to Ohio ports, on a season's charter, but has been again firmly declined.

Placing the average rate of freight at $1.46 to $1.48 from Lake Superior, to Ohio ports last season, vesselmen are not inclined to consider any figures below $1.50, and many would not snap at a season's charter even at those figures, believing that a better average freight would be made by handling their floating property as transportatiou was required, or in other words by running wild. When it is considered that 21 cents is paid for handling the ore, viz, 4 cents for trimming, and 17 cents for discharging, there is left but a moderate margin for the vessel to work on. Several firms have been bit, by figuring too closely on the rates of former seasons, and there is a disposition on the part of vessel men to hold off, unless reasonably fair rates are offered. Bay City lumber freights may be expected a shade better than last season, though we can not quote figures as yet There will be a large amount of lumber to bring forward from that point, and the dispersing of the T. & S. T. company's fleet of 25 vessels, more or less, will have a tendency to harden rates. As we go to press we hear of an offer to charter for the season, a tow barge, lumber, between Cheboygan, Mich., and Ohio ports, f, o, b, at Bay City rates, with liberty to carry cargoes up.

At East Saginaw the lumber trade is brisk, nearly 12,000,000 feet having been sold in the cargo market during last week. Prices on all common grades are firm, and holders are asking and obtaining 50 cents to $1, per 1,000 feet advance on prices at the close of last season.

LITERARY NOTICES.

THE CENTURY MAGAZINE.—In the March Century the most timely essay is that on the "Rules of the House of Representatives." A curious article on "The Use of Oil to Still the Waves," by Lieutenant W. H. Beehler, of the office of Naval Intelligence, United States Navy Department, is a good thing. This essay precedes by a short time the meeting of the International Marine Conference, at which will be discussed this and other schemes for increasing the safety of life and property at sea. The present installment of the Life of Lincoln is entitled "The Edict of Freedom, and completes the story of the Emancipation. Referring to the chapters on this subject, the editor asks, in "Topics of the Time," "Has the mental history of a single sublime and world-approved act ever before been so minutely and authoritatively described?" The frontispiece of the number is a portrait of the Grand Lama of the Trans-Baikal, from a photograph given to George Kennan in exchange for his own. The only other visit to this Grand Lama by a foreigner, so far as is known, was that of Dr. Erman, nearly sixty years before the date of Mr. Kennan's visit. Mr. Kennan,s article describes an interesting and amusing episode of his Siberian tour.

WE are pleased to note that the new Michigan Central ferry, Transfer, built by the Cleveland Shipbuilding Co. is doing excellent work on the Detroit river, notwithstanding rumors to the contrary. On inquiry we find that the officials of the ferry service speak in the highest possible terms of the excellent work done by the boat during the winter, and they feel certain that she is able to cope with any ice that may form in the river. It is rather singular, however, that so small a matter as a feed pipe getting out of water, should have called for so lengthy a comment as some of our contemporaries have indulged in. Below we give a few extracts from the Detroit Free Press.

The car ferries are having a little trouble with the ice just now. The Grand Trunk steamers on the upper crossing have clear water and do very little ice crushing excepting when they go below with cars for the Wabash. The Michigan Central is better equipped this year than ever before, having three iron steamers, two of which are at work while one is reserved for emergencies. Yesterday the broken ice collected at the Michigan Central crossing, so as to make the work of the ferries very difficult, and the new steamer was sent down stream to relieve the jam. She cut her way through very nicely for a short distance when she ran up on something solid. It was necessary to back off and run into the pack again before getting through and when she passed the broken ice which came to the surface was covered with mud, showing that she had crossed a patch of grounded ice. She then proceeded around Sandwitch Point to work a space in the ice, which is expected to let the obstruction down from the crossing.

"I uuderstand quite a defect has been found in the new Michigan Central car ferry," said a man interested in frosted navigation.

"What's the trouble with her?"

"Well, her bow slopes up so gradually that she easily runs up on hard ice. That raises her forward end and brings the feed pipe of the condenser out of water. Then the engine stops. She would stay right there only that she has a propeller run by a separate engine at the after end. This is reversed and pulls her back into the water again. She is a very powerful steamer, however, and is doing good service."

An emyloyee of the Michigan Central said yesterday that the defect was of little importance as the feed pipe could be lowered without very much trouble. On Thursday when the new steamer went down stream to relieve the ice jam, she did in two hours the work that would have kept any of the old steamers ten hours at least. Yesterday the crossing was practically clear as a result of her work.

DIXON'S

GRAPHITE

PIPE JOINT GREASE

FOR STEAM OR GAS PIPES

makes a perfect joint that can be opened with ease in three years or thirty years. Bolts, screws, etc., smeared with this grease will not rust even in the dampest places. Write to Jos, Dixon Crucible Co Jersey City, N. J., for circulars.

TRUST IN GOD AND OIL.

TALLAPOOSA, GA., Feb.uary 25, 1889.
Editor of Marine Record.

Dear Sir:—In accordance with my promise to you, I forward a copy of the letter written after my experience on the steamship Professor Morse. The letter was published in the Times Democrat, October 22. 1889, but as you desire to republish in the interests of mariners I herewith enclose you a literal copy. —Yours respectfully,

L. D. PHILIPS

TRUXILLO, October 12, 1888.

MY DEAR FRIEND: We arrived here today after a very stormy passage on board of the steamship Professor Morse. The first part of the voyage across the Gulf of Mexico was very pleasant, and there was nothing in the weather to indicate anything but a pleasant trip and smooth sea to the end. As we passed from the gulf into the Carribean sea the wind, which had been blowing steady from the northeast, gradually increased to a gale and from that to a hurricane, which struck us about 1 a. m. Friday, the 8th. The ship was immediately put before it, and for three hours she actually flew from the roaring wind and sea that followed. The hurricane steadily increased in strength and volume, and at about 4 o'clock a m. the ship broached to and swung up into the wind in spite of all that could be done to prevent it. Immediately upon the commencement of the hurricane Cadtain Pendleton had two bags filled with oakum and oil put over the forward part of the ship, which prevented the great seas that were running behind us from breaking over and sweeping the decks.

When she became unmanageable and swung off into the trough of the sea, she was in a most perilous situation, as we were entirely at the mercy of the waves, which were running in almost every direction, the wind having shifted gradually from the northward to the southwest, almost completing the circle. Captain Pendleton was fully alive to the situation, and had put out the regulation drag to endeavor to keep the ship's head to the sea, but to no purpose. He then put out four oil bags on the windward side of the ship, and the oil acted like magic. The sea became smooth for at least seventy-five yards in that direction, and the ship lay as comfortable as though she were in the Mississippi river. Not a sea broke over us, while ahead, astern, and to leeward the ocean was in a wild pandemonium, and the howling of the winds drowned all other sounds. It was fearfully grand and awful. The great waves seemed to be fighting one another, and the air was filled with foaming spray, which was torn from them and thrown up in their frightful combat. The air assumed a grayish hue, as though it were filled with ashes, obstructing the view for any great distance; in fact, to those on board there appeared but one way to look, and that was up. Such a wild, weird scene it had never been my fate to witness before, and I sincerely hope that I may never see it again; but if chances shall so order it that I shall be in another such storm, my prayer is that I may be on board of a ship commanded by Captain Pendleton, with his oil bags. It was a verification of a certain text or passage in the Good Book, which says something about pouring oil upon the troubled waters.

It seemed as if the great winds and waves had arranged for a grand ball to take place then and there, and that all the demons of "Hades" (new version) had joined in the dance. It was magnificently horrible, while about us, in the direction that danger could come from, the sea was as smooth as glass. I cannot find words to fully describe the scene. I sincerely hope that you may never have a like experience. There was no excitement among the officers or crew of the ship, and every order was obeyed cheerfully and promptly.

We lay in the trough of the sea for thirty hours, and during that time nobody closed an eye, and we did not have anything to eat but a few crackers, as it was impossible to cook.

I believe that the ship and the lives of all on board were saved by the free use of oil; therefore, my trust hereafter, when on the water will be in God and oil.

With many kind regards, I remain, yours,

L. D. PHILIPS.

THE bill introduced by John P. Healy, chairman of the Cuyahoga delegation of the house of representatives, at Columbus, on Tuesday last, is as follows:

Sec. 1—Be it enacted by the general assembly of the state of Ohio, that the council of the city of Cleveland, O., is hereby authorized to issue bonds in any sum not exceeding $22,000, for the improvement of the harbor of said city; at the "old river bed;" said bonds to be of such denominations and payable at such times and places as said council may determine, not exceeding twenty years, and said bonds shall bear a rate of interest not exceeding 5 per cent annum payable semi-annually, and shall not be sold for less than par value, and said council shall annually here after cause the necessary taxes to be levied to pay the interest and principal on said bonds as they shall become due.

We are informed that the vessel owners will meet at the city hall at 3 o'clock Saturday afternoon to take action on this bill. there is no doubt bnt that the opening of the old river bed would give an impetus to the coal and iron ore trade at this port, and legislation is earnestly to be desired having this object in view.

MARINE DEPUTIES.

BIOGRAPHY OF BYRON C. BEDELL, MARINE CLERK AT PORT HURON, MICH.

Special Correspondence to the Marine Record.

PART II.

In the early spring, when the first chippies begin to hop around and the sailors begin coming down from their winter perches to talk over the opening of navigation, a topic always renewed with each recurring season, as though it were not the greatest chestnut in the world, it is then that around about and on top of one desk in the Port Huron custom house is inaugurated a kind of an open to the world, sixty day's rustle, that could occupy a dozen hands, but there are only one pair to execute this shuffle which consists of issuing in about two months time more licenses, enrollments, bonds, oaths, certificates of inspection, etc., etc., than are issued at any otoer port in a like period of time. The hands that execute this work in a manner that keeps every one asking him out to have a cigar or the earth, are those of General Byron C. Bedell, born at Dewitt, Clinton county, Mich., in 1842. He is today as frisky as a yearling colt. Mr. Bedell cast his first presidential vote for Stephen A. Douglass in 1860, and has never strayed out of his party's lines since he enlisted in the year 1861, serving until discharged in 1865, married in 1869, he went into the grocery business. Later he was employed by and served with the Singer sewing machine company eleven years as one of its general agents; from this line of business he was taken by accepting an appointment tendered him by Collector Charles A. Ward, February 7th, 1887, which place was only the stepping stone for him to higher things, as within two months he was promoted by Collector Ward to his present lucrative berth (termed by an overwise public a sinecure.) Mr. Bedell, if compelled to retire under the reign of the incoming administration, will leave a host of friends among the vessel men whose interests he has faithfully served as a public servant with an eye single to the discharge of his duties, irrespective of his own convenience. It is rumored that Mr. Bedell has put in his leisure hours the past winter writing a romance, political, entitled "The Fate of the White Plug Hat, or Is The War Over," to be published under the exclusive management of the political team of Port Huron, known as B. & B., or Bedell & Buckeridge. ISIS.

DOCK PROPERTY TRANSFERRED.

Some days since Mr. J. H. Wade, president of the Valley company, purchased a block of dock property from the heirs of the late D. P. Rhodes, represented by Augusta C. Hanna and others, for $60,000. The piece of land is known as block D in the Buffalo company's allotment and is situated in the most desirable part of the channel known as the old river bed, between the Main street slip and the bridge now used by the Valley for its Lake Shore and Cleveland & Pittsburg connections.

The frontage on the channel includes 700 ft. with a depth of 30 feet. Steps will be taken immediately to expend $50,000 in improving the docks and putting up the best hoisting and conveying machinery and the plant will be used entirely for handling coal and ore. The managers of the company declare that the proposed improvements are not in the line of talk, but that preparations for the work have already begun. The Valley is already operating similar docks east of the bridge with others near the central blast furnace of the Cleveland rolling mill company and lumber docks on both sides of the Seneca street bridge. The constant increase in the coal and ore traffic of this neighborhood, however, prompts the additional improvement.

Although the announcement several days ago that the Cleveland & Pittsburg company would expend $80,000 on its docks in the old river bed was taken with some doubt by the local vessel owners and ore shippers who are most directly interested, it is about certain now that the plans as detailed will be carried out, although contracts have not as yet been let. The C. & P. company is certainly in need of dock improvements, and the time has come when something must be done by the Pennsylvania company in order to hold its share of the ore business. The old docks have been the cause of general complaint for two seasons past.

The schooners Harriett Ross and Mary Hattie are being thoroughly rebuilt at Port Huron. The former was built in 1853 and the latter in 1865.

We apologize for mistakes made in all former issues and say they were inexcusable, as all an editor has to do is to hunt news, and clean the rollers, and set type, and sweep the floor, and pen short items, and fold papers, and write wrappers, and make the paste, and mail the papers, and talk to visitors, and distribute type, and carry water, and saw wood, and read the proofs, and correct the mistakes, and hunt the shears to write editorials, and dodge the bills, and dunn delinquents, and take cussings from the whole force, and tell our subscribers that we need money. We say that we've no business to make mistakes while attending to these little matters, and getting our living on gopher tail soup flavored with imagination, and wearing old shoes and no collar, and a patch on our pants, obliged to turn a smiling countenance to the man who tells us our paper isn't worth $1 anyhow, and that he could make a better one with his eyes shut.—*Leman (Iowa) Globe.*

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TAKING THE PLACE OF WOODEN BLOCKS FOR ALL PURPOSES.
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No. 18 Ohio Street, Buffalo, N. Y.

FOR SALE.
STEAM BARGE PASSAIC, and four consorts. Capacity, 3,300 tons coal or 2,400,000 feet timber. Boat now laid up at Buffalo. For terms and price, inquire of J. M. JONES, 52 Griswold St., or C. C. BLODGETT, 242 Woodbridge st., Detroit, Michigan.

HARBOR TUG FOR SALE.
THE TUG MYRTLE, of Sandusky, Ohio, for sale cheap. Is in first-class condition. For particulars write to FRED GROCH, Sandusky, O.

WANTED—TO BUY TWO TOW BARGES of about, 500,000 capacity, or two A 2 schooners. Address, CAPTAIN A. FLAGSTAD. Montague, Mich.

WANTED.
A GOOD MARINE ENGINE, 20x22, with or without boiler, etc. Address box 1, branch office Marine Record, 252 South Water st., Chicago, Ill.

WANTED.
SCHOONERS—20 to 40 tons, in good repair. Send full description and photo or drawing. Address, B. C. LINDLEY, Box 479. Traverse City, Mich.

UNITED STATES ENGINEER OFFICE, Cleveland, O., Feb. 12, 1889.—Sealed separate proposals in duplicate, will be received at this office until 12 m., on Friday, March 15, 1889, and then opened, for dredging at the following harbors: At Monroe harbor, Mich.; at Toledo harbor, O.; at Port Clinton harbor, O.; at Sandusky harbor, O.; at Huron harbor, O.; at Black River harbor, O.; at Cleveland harbor, O.; at Fairport harbor, O.; at Ashtabula harbor, O. All information can be obtained at this office. The United States reserves the right to reject any or all proposals. Preferences will be given to materials and plant of domestic production or manufacture, conditions of quality and price (import duties included) being equal. The attention of bidders is invited to acts of Congress approved February 26, 1885, and February 23, 1887, vol. 23, page 332, and vol. 24, page 414, statutes at large. L. COOPER OVERMAN, Major of Engineers. feb 21-4

WANTED.
TUG.—A good towing tug, about 18x20 engine. Inquire of CAPT. E. S. SMITH, No. 30 Twelfth avenue, East Duluth, Minn.

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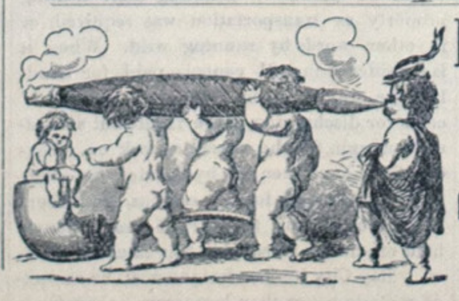

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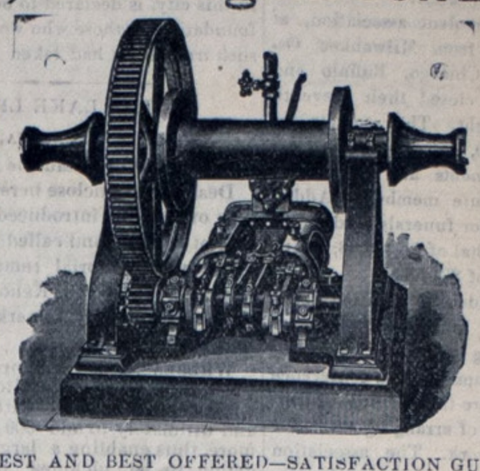

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FOR SALE.
WANT AN OFFER for a marine boiler, in good condition, ready to use; dimensions, 8½ feet diameter and 18 feet long. CAPT. V. E. MEYERS, Manitowoc, Wis.

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FOR STEAMBARGE, A NEW PASSENGER steamer, will carry 75 tons freight, allowed 115 passengers. Will sell on easy terms or exchange for steam barge. Address, BOX 90. Petosky, Michigan.

FOR SALE.
MARINE ENGINE nearly new, includes bilge pump, hand pump and force pump, cylinder 17 by 20. Will sell cheap. Address. K. BOX, Record Office.

FOR SALE
TWO MARINE BOILERS 7 years old in good order for sale cheap, 9¾ feet shell by 16 feet long for $1,000 each, ½ down balance one year, by C. H. LANE, BUFFALO, N. Y.

FOR SALE.
PASSENGER PROPELLER GOLDEN EAGLE, Thoroughly over hauled this spring, "Suston" Engine 14×14, 100 pounds steam, runs 14 miles an hour easily, and carrys 00 people. Owner has no route for her and will sell for what she is worth. JAMES E. ENGLISH East Saginaw, Mich.

FOR SALE.
TUG DREADNAUGHT is offered by the undersigned for sale cheap. She is in good condition, has double engines, and it is well known that the machinery is as good as can be made. The boilers are allowed 100 pounds of steam. Inquire of CAPTAIN THOMAS DOWLING, 248 Clinton st., Cleveland, O.

FOR SALE—
A HANDY THREE MASTED SCHOONER, well found and equipped, will carry 500 tons of coal, or 270 M feet of lumber. Rates, A 2½.
Also, a two-masted schooner; capacity, 425 tons of coal, or 250 M feet of lumber. Rates, A 2½.
Both these vessels have been well kept up and are most desirable investment. Apply to PARKER & MILLEN, Detroit, Mich., or to THE MARINE RECORD, Cleveland, O.

FOR SALE.
SCHOONER FRANC MINER. Her dimensions are as follows: 68 feet keel, 17 feet beam, 5 feet hold, she has two masts and is three years old, in good shape, outfit and all. I also have a complete outfit for a tug or barge, engine 18 by 20, boiler 6½ by 14, shaft wheel and all complete For particulars write to L. NAU, Green Bay, or CAPTAIN J. A. CUSICK, Fort Howard, Wis.

FOR SALE.
BARGE COL. BRACKET—She carries 260M feet of lumber, 420 tons of coal. Had $900 worth of repairs last season. Fit out good. Price $1,600. Mention this paper. ED. J. KENDALL, Port Huron.

FOR SALE.
BARGES LEADER AND JUNIPER, capacity 375,000 each. For price and terms inquire of N. MILLS & CO., Cleveland, Ohio.

FOR SALE.
HARBOR TUG for sale. Engine 18x20, boiler 5 feet 6 inches by 11 feet, and allowed 100 pounds of steam, and is A 2, valued at $5,500 by Lloyd's register, but the owner will take $4,600 cash. For further particulars inquire at 113 Franklin avenue, Cleveland, O. CAPT. E. DAHLKE.

FOR SALE.
BOILER AND ENGINE. Engine 12½ by 12, boiler 4½ by 11, allowed 90 pounds steam; shaft wheel, pumps, all in running order. Price, $700. Apply to CAPTAIN H. N. JEX, Port Huron, Mich.

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Until further notice trains will leave from the new Central Depot, South Water street and Viaduct, as follows:

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No. 65, Pittsburg Express	†12 50 p m
No. 65, New York Express	* 6 50 p m
No. 63, Pittsburg Express	* 6 50 p m
No. 69, Pittsburg Local Express	† 8 10 p m
No. 13, Youngstown Local	† 5 25 a m

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TWO TUGS and THREE MARINE BOILERS.

Tug Uncle Sam.
Length 60 feet, beam 14 feet, depth 7 feet, draft 8 feet, engine 17 by 17; steel boiler 12 feet long, 5 feet 4 inches diameter, of ⅜ths plate, allowed 100 pounds of steam Hull rebuilt in 1887. Price $5000.

Tug J. C. Ingram,
Length 54 feet, beam 18 feet 6 inches, depth 7 feet, engine 17 by 18, boiler 10 feet long, 5½ feet diameter, of ⅜ths plate, allowed 90 pounds of steam. Rebuilt in 1885. Price $5000.

A Marine Steel Boiler,
17 feet long, 7 feet diameter, allowed 110 pounds of steam, 6 years old, in good condition; price $800.

A Marine Iron Boiler,
14 feet long, 7½ feet diameter, allowed 80 pounds of steam, in good repair; price $400.

Marine Iron Boiler,
14 feet long, 5½ feet diameter, allowed 90 pounds steam, in good condition; price $300.
Apply to DUNHAM TOWING & WRECKING CO., 234 South Water St., Chicago, Ill.

FOR SALE.
TUG BOAT, STEAM YACHT, &c.
—AT—
Bell's Steam Engine Works,
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1 new Wooden Tug, 76 feet long, 15½ feet beam; engine 18x20, steel boiler 6 ft. 8 in. by 10 ft. 9 in.
1 steel and iron Steam Yacht 85 feet long, 14 feet 4 inches beam; compound engine 9x18, 12 in. stroke, independent condenser, with boiler all complete.
1 wooden steam yacht, "Little Mac," 60 feet long, 10½ feet beam; engine 8x9, Scotch steel boiler, 2 masts, and furnished all complete.
1 marine engine 10x22.
1 marine engine 14x16.
1 marine engine 14x14.
Apply as above. January, 1889.

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Notice to Vessel Owners.
I HAVE CUSTOMERS FOR several barges, both steam and tow, and would be pleased to hear from each and every owner having vessels for sale, giving name, capacity, draught of water, light and loaded. If steam, condition and age of boiler, size of engine, etc. Correspondence solicited direct from owner, as I will not divide commission. Address, J. F. WHITTEMORE. Agent and Ship Broker. Bay City, Mich.

The world will never know, for it will never stop to consider, how much it owes to the inventor, the artisan, and the engineer of the past. While some of them lie in honored sepulchers and their memory is revered, vast numbers of them lie buried in unknown graves. Many sleep their last sleep in the village graveyard on the hill which overlooks the scene of their life's struggles. Some yet live, leading quiet, plodding lives, who in one way or another, by their genius, their industry, and perseverance, have done much to bring about the wonderful changes of which I speak. Here and there, as managers of vast iron and steel works, mines, and manufactories, which their genius created, may be seen moving about quiet, thoughtful men, who, were they not pointed out to you, you would never dream were the originators of the vast industries they control.

In many instances most marvelous changes have taken place within your remembrance. There are places now busy with the hum of industry, whose towering chimneys blacken the air with their belching clouds of smoke, where the clamor of clashing wheels and shrieking whistles fill the air with strange sounds, and where the measured beat of immense steam hammers make all about to tremble; places where before a hundred fiery furnaces relays of swarthy workmen move to and fro, charging into their hot mouths or drawing from their fiery throats huge ingots of iron or steel, conveying them to gaping shears whose iron jaws bite them asunder, or to remorseless rolls which mash and mould them through unyielding grooves, and from out which the hissing, tortured metal writhes and twists like some great reptile in agony. If you do but follow the heated metal as it is drawn back and forward, pushed here and there, turned over and about as it would seem by unseen hands, helpless and as yielding as the clay in the hands of the potter, you will soon find it resting on its hot bed, a finished rail that shall bear upon its upturned head the traffic of the nation. And all this shall be upon what was, within your memory, a green meadow, beside which there flowed a placid river, and where the most energetic action within one's vision was the slowly moving yoke of oxen which on the hill side beyond leisurely dragged a plow; or the boy, sitting on the projecting trunk of a dead tree, watching with patience the too restful floating cork which even the passing breeze was too gentle to disturb with a rippling wave.

I can point you places where, but a few years ago, naught was to be seen but a worn-out cotton plantation, with here and there a tumble down log cabin without doors or windows, ornamented at one end by a jagged stick chimney, and at the other with a coon skin stretched out to dry; and where the oldest and almost only inhabitant might have been seen sitting on the top rail of a worm-eaten fence, smoking leisurely a cob pipe, watching the while with half closed eye the lazy, floating buzzard that circles in the sky above him.

Go there to-day, and note the changes that have come over the scene. Over lines of steel which reach from the storm-tossed waves of Erie to where the dull swash of the waters of the Gulf die away amid the lagoons of the South, from the sands washed by the Atlantic to the rocks of the Rockies, cars freighted with the product of many climes pass to and fro. From beneath the soil once plowed by the slave there now comes to the sunlight thousands of tons of coal to feed fires that go not out by day or by night, that give breath to panting engines, which in turn set aglow vast furnaces that light up the midnight hours so recently devoted to silence and to solitude. Along the vanishing furrows the plowman had left, lines of street cars are to be seen; on all sides mills and manufactories give a hum of industry all unknown before. Churches, school houses, and costly dwellings have sprung up like magic amid the stubble fields of the past, and over the scene where ignorance and indolence so lately held undisputed sway, manufactures have bred commerce, and busy, whirling wheels have quickened the life blood of trade, until through every artery and vein it pulsates and flows with a force and vigor never before known beneath a southern sun. What has brought about this change? Who was it that waved above this hopeless spot the magic wand that woke it into life, and thrilled it into impulsive energy? Need I tell you it was the engineers, and largely so the mechanical engineers? Who are the mechanical engineers of our country? They are men seldom seen on any platform, men who are seldom heard in any public assembly, and whose names adorn no printed page. They are men whose lives have been spent amid the rumble of whirling wheels, the roar of flaming furnaces, the hum of spindles, and the click of flying shuttles. Among them are many whose forms have grown bent by labor at the bench or the lathe, whose eyes have grown dim by the feeble light of the workman's lamp, whose gray hairs and worn looks speak of hours of toil and nights of restless tossing, as they studied and dreamed on some then unsloved problem which, worked out later, has benefited all the world. They it is who have invented, worked out, and brought to their present state of perfection the steam engines as shown in the locomotive, the steamship, and the mill. They have devised and built the tools and machines that have made comforts possible in the poorest homes, luxuries in the richest. Their labors and their lives have advanced civilization, education, and all good things; that have lifted the world up higher, made it more comfortable, more enjoyable, and better suited for the happiness of all in it; and I feel that I would not have done my duty at this time, to them and their memory, did I not say all honor to the mechanical engineers of the "chalk age"

SAMUEL F. HODGE & CO.,

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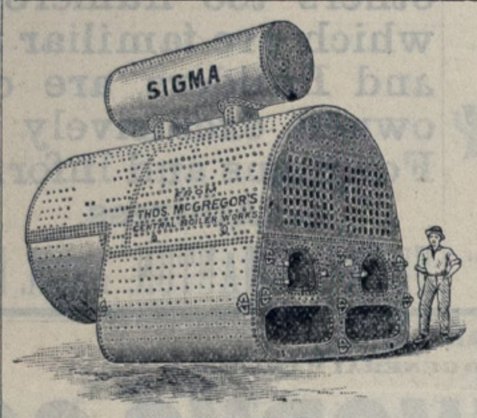

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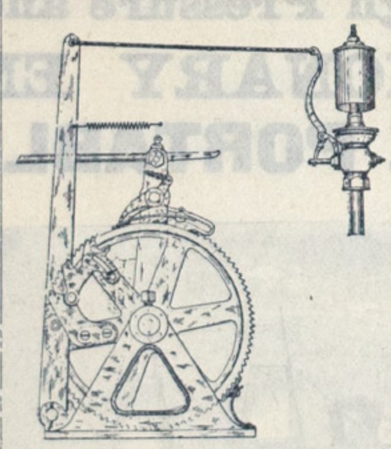

Chase Fog Whistle Machine

This machine has been placed on the following steamboats during the past year: SPOKANE, WALLULA, KASOTA, CHARLEMAGNE TOWER, JR, YAKIMA, MISSOULA, SITKA, FAYETTE BROWN, R. J. HACKETT, FOREST CITY, SPARTA, HAVANA, VIENNA, OSCAR TOWNSEND, CITY OF CLEVELAND, HENRY CHISHOLM, SUPERIOR, E. B. HALE, M. B. GROVER, J. S FAY, R. P. RANNEY, SMITH MOORE, CHARLES J SHEFFIELD, IRA H. OWEN, CAMBRIA, CORSICA, J. H. OUTHWAITE, SAMUEL MATHER, R. R. RHODES, COLUMBIA, AURORA, OHIO, WM. EDWARDS, S. E. SHELDON, AUSTRALASIA, RALEIGH, BULGARIA, ROUMANIA, J. F. EDDY, HIAWATHA, THOS. ADAMS, A. P. WRIGHT, GLADSTONE, E. P. WILBUR, SOO CITY, E. M. PECK, ROBERT L. FREYER AND NORTHERN LIGHT,

To the President and Board of Supervising Inspectors of Steam Vessels:

Your committee to which was referred the 'Ghase Fog Whistle Machine" beg leave to report: "That we have carefully examined the same and find that it blows at regular intervals, being worked by the engine, thereby insuring regular and continuous blasts for any length of time that may be required and we recommend it or similar device to owners of steam is as an additional safeguard to navi to.

H. S. LUBBOCK,
GEO. H. STARBUCK, } Committee.
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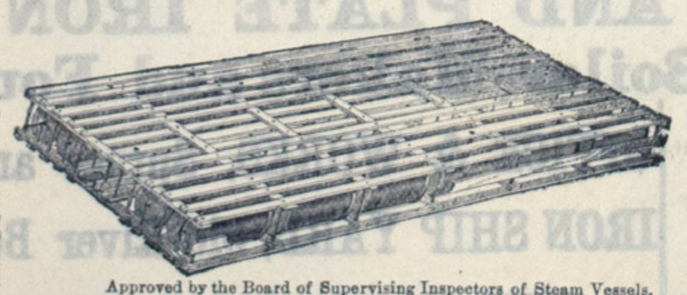

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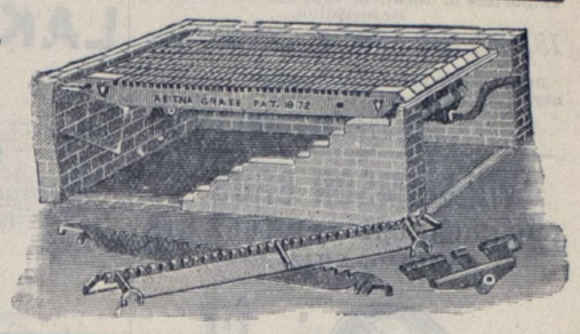

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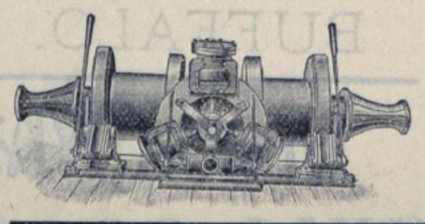

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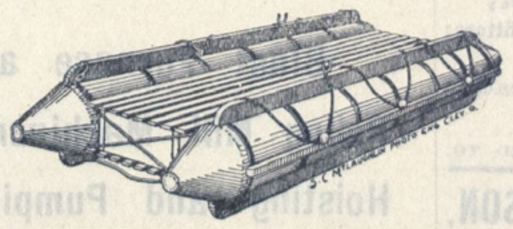

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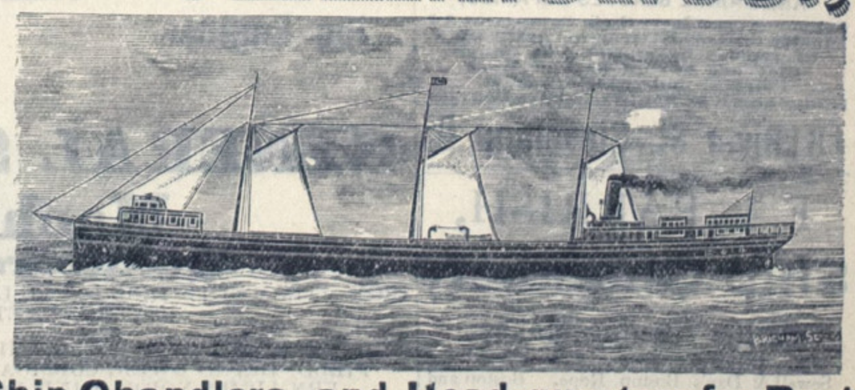

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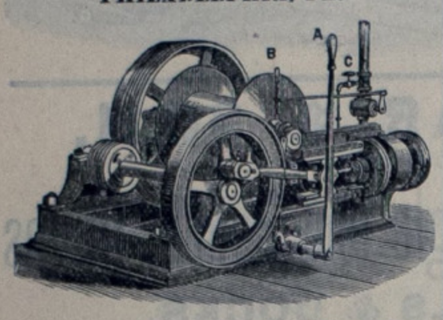

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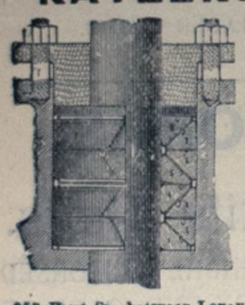

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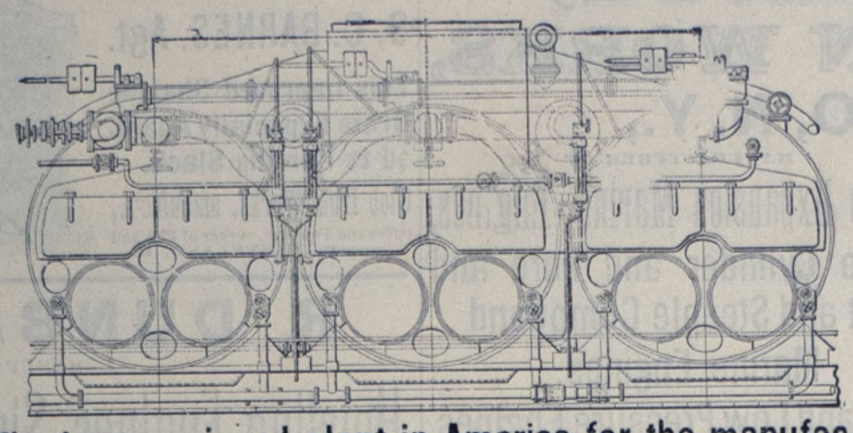

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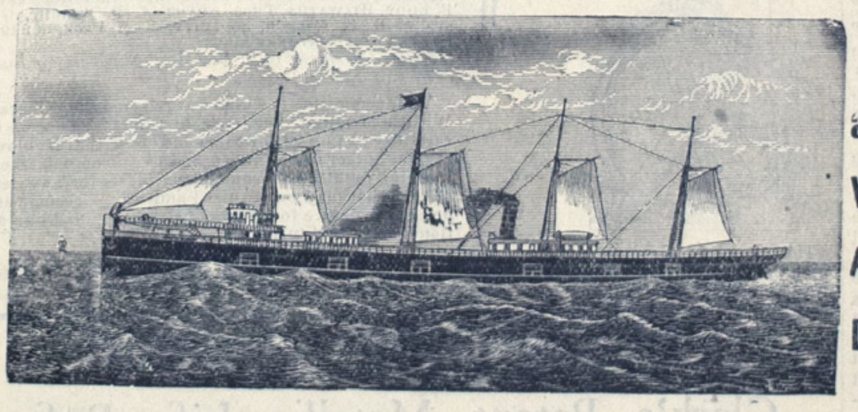

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